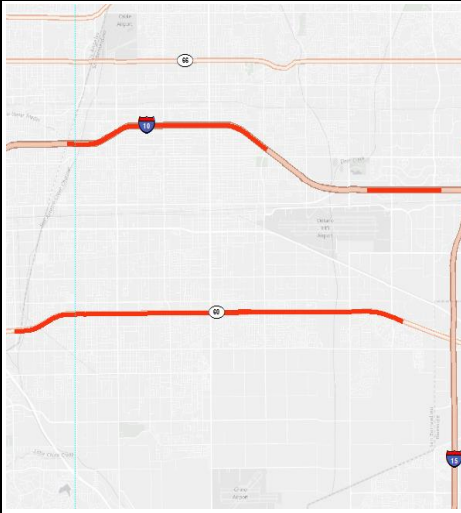

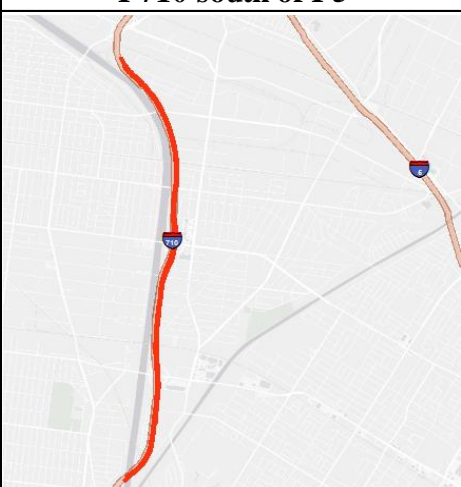


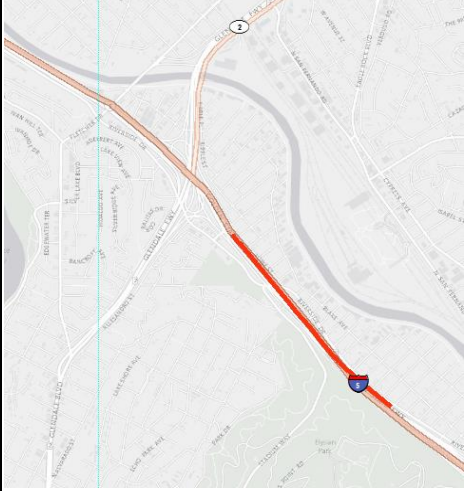
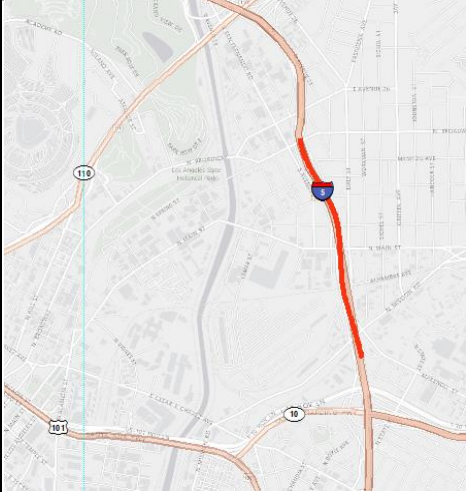
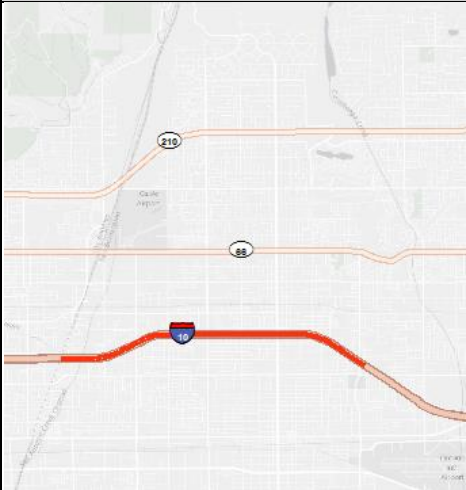
## APPENDIX A: Current and expected impacts of freight

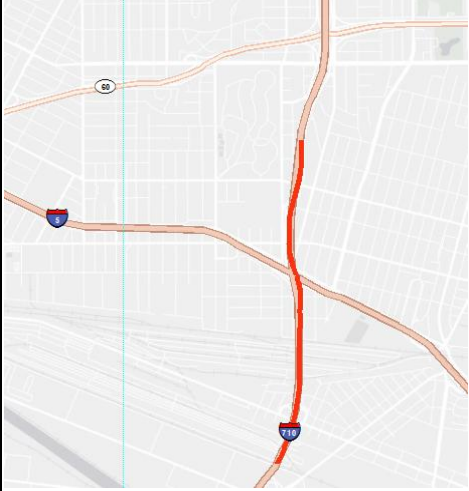
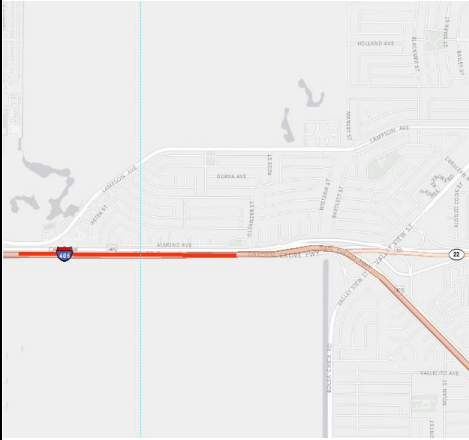
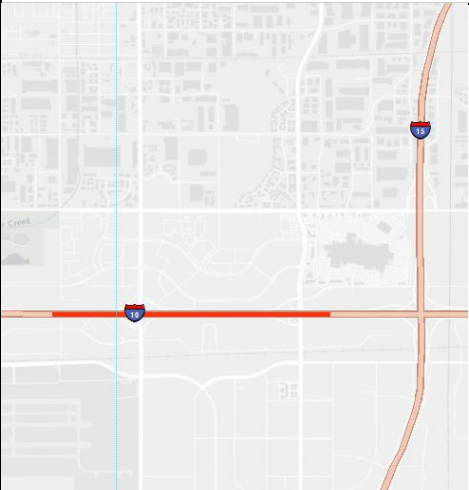
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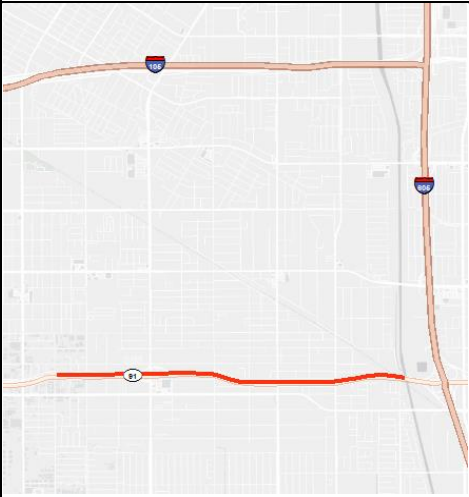
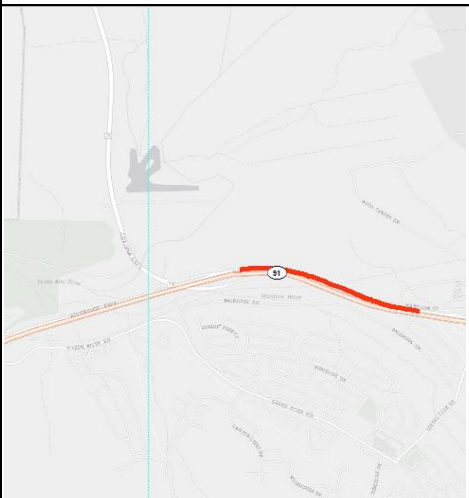
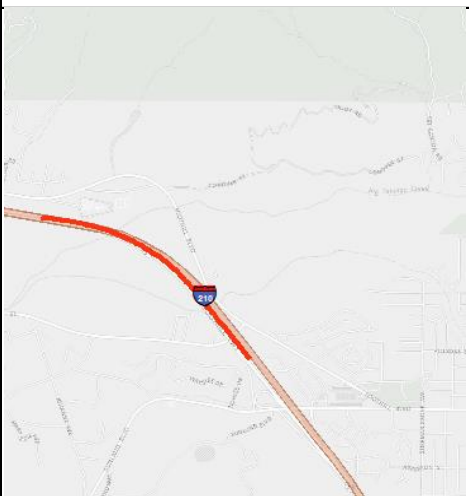
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Table 1 Profile of top 15 highway freight impact bottlenecks in the Los Angeles region

	<b>SR-60 west of I-15</b>	Length (mile)	9.95
		Direction	East
		County	San Bernardino
		City	Chino-Ontario
		Average total volume	36,745
		Average truck volume	3,454
		Average share of trucks	9.40%
		Congestion speed (mile/h)	19.40
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	1,278,309
		Total peak hour all-vehicle delay (vehicle*hour)	11741.6
		Average peak hour freight congestion value (truck*mile/hour)	120,160
		Total peak hour freight delay (truck*hour)	1103.7
	<b>SR-60 north of SR-57</b>	Length (mile)	0.85
		Direction	East
		County	San Bernardino
		City	Diamond Bar
		Average total volume	56,482
		Average truck volume	2,594
		Average share of trucks	4.60%
		Congestion speed (mile/h)	8.10
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	2,650,495
		Total peak hour all-vehicle delay (vehicle*hour)	6580.1
	<b>I-710 south of I-5</b>	Length (mile)	4.36
		Direction	North
		County	Los Angeles
		City	Cudahy-Bell-South Gate
		Average total volume	34,571
		Average truck volume	3,745
		Average share of trucks	10.85%
		Congestion speed (mile/h)	26.85
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	788,302
		Total peak hour all-vehicle delay (vehicle*hour)	5826.8
		Average peak hour freight congestion value (truck*mile/hour)	85,395
		Total peak hour freight delay (truck*hour)	631.2

	<b>I-5 south of SR-2</b>	Length (mile)	0.99
		Direction	North
		County	Los Angeles
		City	Los Angeles
		Average total volume	48,993
		Average truck volume	2,626
		Average share of trucks	5.30%
		Congestion speed (mile/h)	8.20
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	2,289,742
		Total peak hour all-vehicle delay (vehicle*hour)	4875.0
		Average peak hour freight congestion value (truck*mile/hour)	122,729
		Total peak hour freight delay (truck*hour)	261.3
	<b>I-5 north of I-10</b>	Length (mile)	1.05
		Direction	North
		County	Los Angeles
		City	Los Angeles
		Average total volume	45,881
		Average truck volume	2,713
		Average share of trucks	5.90%
		Congestion speed (mile/h)	9.70
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	2,078,952
		Total peak hour all-vehicle delay (vehicle*hour)	4246.5
	<b>I-10 west of I-15</b>	Length (mile)	4.96
		Direction	East
		County	San Bernardino
		City	Upland-Montclair-Ontario
		Average total volume	36,115
		Average truck volume	3,533
		Average share of trucks	10.10%
		Congestion speed (mile/h)	25.71
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	1,058,068
		Total peak hour all-vehicle delay (vehicle*hour)	3983.6
		Average peak hour freight congestion value (truck*mile/hour)	103,507
		Total peak hour freight delay (truck*hour)	389.7

<b>I-710 @ I-5</b> 	Length (mile)	1.82
	Direction	North
	County	Los Angeles
	City	Commerce
	Average total volume	36,276
	Average truck volume	3,690
	Average share of trucks	10.31%
	Congestion speed (mile/h)	15.73
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	1,421,341
	Total peak hour all-vehicle delay (vehicle*hour)	3608.9
	Average peak hour freight congestion value (truck*mile/hour)	144,579
	Total peak hour freight delay (truck*hour)	367.1
<b>I-405 @ SR-22</b> 	Length (mile)	1.01
	Direction	East
	County	Orange
	City	Seal Beach
	Average total volume	59,865
	Average truck volume	2,739
	Average share of trucks	4.58%
	Congestion speed (mile/h)	13.70
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	2,467,994
	Total peak hour all-vehicle delay (vehicle*hour)	3311.3
	Average peak hour freight congestion value (truck*mile/hour)	112,918
	Total peak hour freight delay (truck*hour)	151.5
<b>I-10 @ I-15</b> 	Length (mile)	1.76
	Direction	East
	County	San Bernardino
	City	Ontario
	Average total volume	41,758
	Average truck volume	3,454
	Average share of trucks	8.38%
	Congestion speed (mile/h)	18.59
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	1,511,751
	Total peak hour all-vehicle delay (vehicle*hour)	2734.7
	Average peak hour freight congestion value (truck*mile/hour)	125,044
	Total peak hour freight delay (truck*hour)	226.2

<b>SR-91 west of I-605</b> 	Length (mile)	2.74
	Direction	West
	County	Los Angeles
	City	Long Beach-Bellflower
	Average total volume	36,727
	Average truck volume	3,670
	Average share of trucks	10.00%
	Congestion speed (mile/h)	28.02
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	990,098
	Total peak hour all-vehicle delay (vehicle*hour)	2020.5
	Average peak hour freight congestion value (truck*mile/hour)	98,937
	Total peak hour freight delay (truck*hour)	201.9
<b>SR-91 @ SR-71</b> 	Length (mile)	0.95
	Direction	West
	County	Riverside
	City	Corona
	Average total volume	38,661
	Average truck volume	3,034
	Average share of trucks	7.85%
	Congestion speed (mile/h)	15.45
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	1,528,792
	Total peak hour all-vehicle delay (vehicle*hour)	1707.5
<b>I-210</b> 	Average peak hour freight congestion value (truck*mile/hour)	119,975
	Total peak hour freight delay (truck*hour)	134
	Length (mile)	1.10
	Direction	West
	County	Los Angeles
	City	Los Angeles
	Average total volume	32,529
	Average truck volume	3,022
	Average share of trucks	9.29%
	Congestion speed (mile/h)	19.92
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	1,141,098
	Total peak hour all-vehicle delay (vehicle*hour)	1150.7
	Average peak hour freight congestion value (truck*mile/hour)	106,010
	Total peak hour freight delay (truck*hour)	106.9



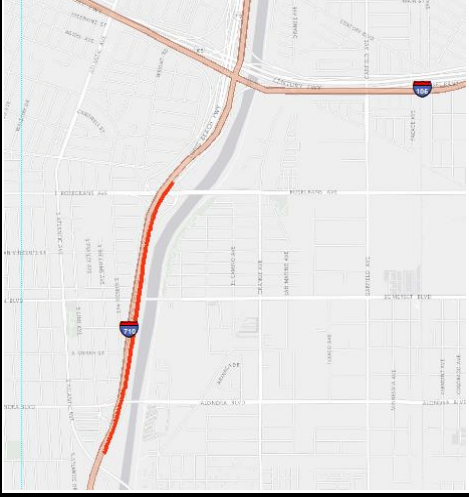
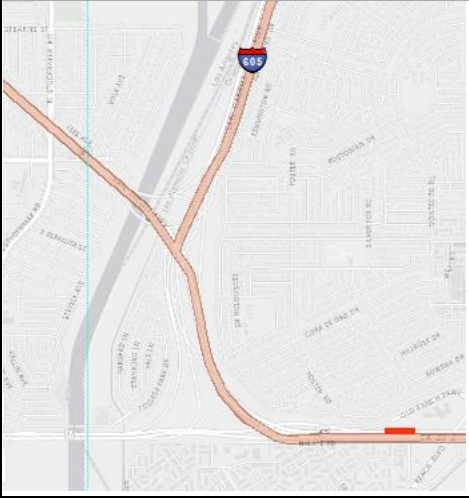
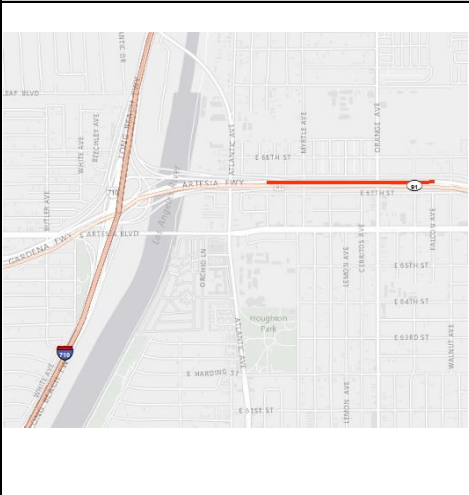
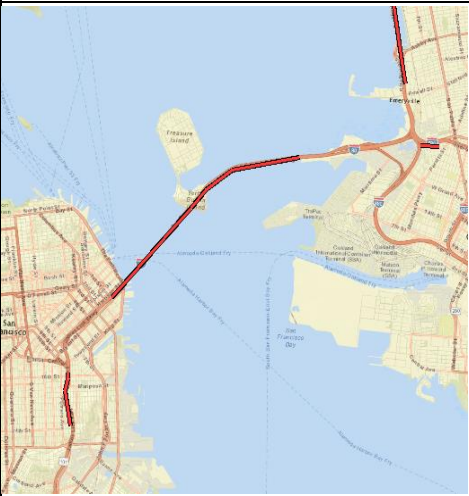
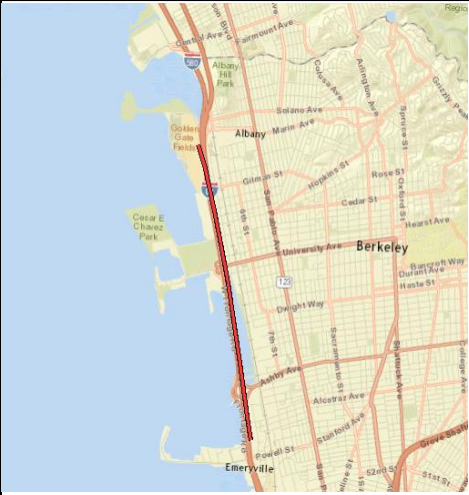
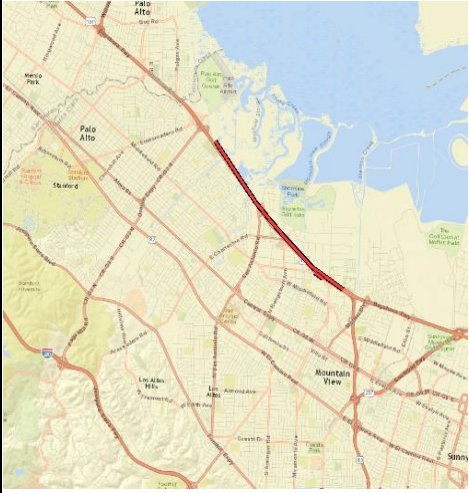
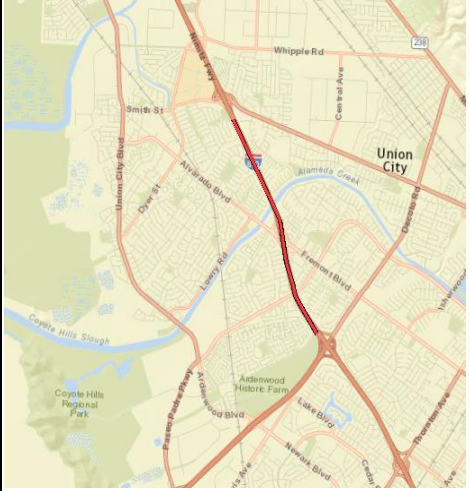
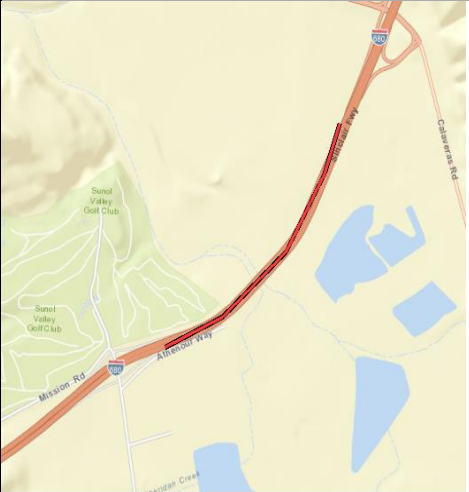
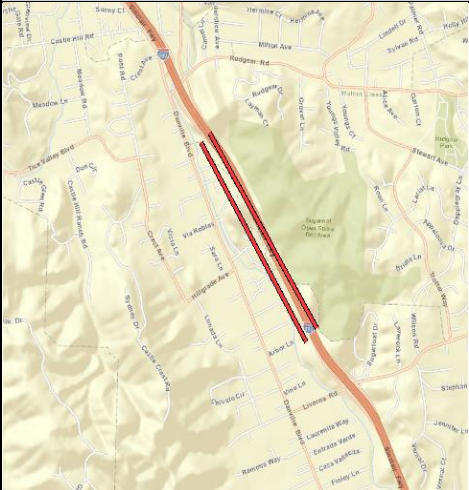

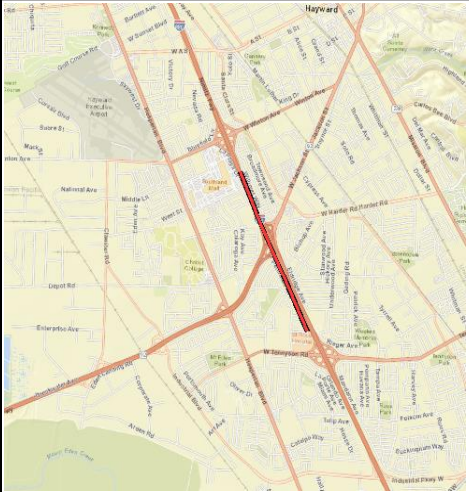
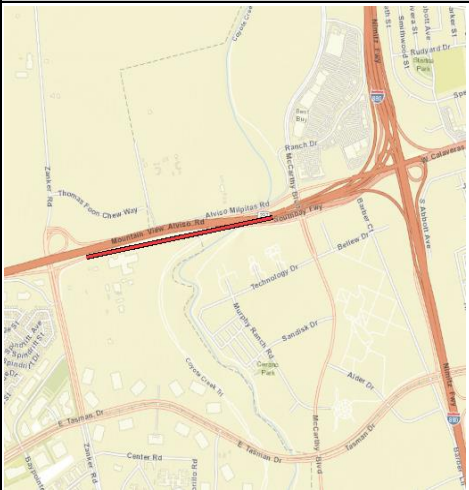
<b>I-710 south of I-105</b> 	Length (mile)	1.35
	Direction	North
	County	Los Angeles
	City	Compton-Paramount
	Average total volume	44,213
	Average truck volume	4,062
	Average share of trucks	9.19%
	Congestion speed (mile/h)	28.60
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	1,166,986
	Total peak hour all-vehicle delay (vehicle*hour)	1017.7
	Average peak hour freight congestion value (truck*mile/hour)	107,215
	Total peak hour freight delay (truck*hour)	93.5
<b>I-405 @ I-605</b> 	Length (mile)	0.11
	Direction	West
	County	Orange
	City	Seal Beach
	Average total volume	61,762
	Average truck volume	2,705
	Average share of trucks	4.38%
	Congestion speed (mile/h)	11.31
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	2,697,618
	Total peak hour all-vehicle delay (vehicle*hour)	465.8
	Average peak hour freight congestion value (truck*mile/hour)	118,148
	Total peak hour freight delay (truck*hour)	20.4
<b>SR-91 east of I-710</b> 	Length (mile)	0.57
	Direction	West
	County	Los Angeles
	City	Long Beach
	Average total volume	38,036
	Average truck volume	3,737
	Average share of trucks	9.84%
	Congestion speed (mile/h)	29.93
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	953,170
	Total peak hour all-vehicle delay (vehicle*hour)	344.0
	Average peak hour freight congestion value (truck*mile/hour)	93,648
	Total peak hour freight delay (truck*hour)	33.8

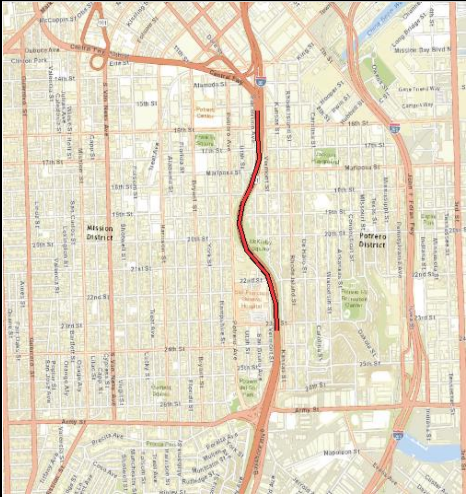
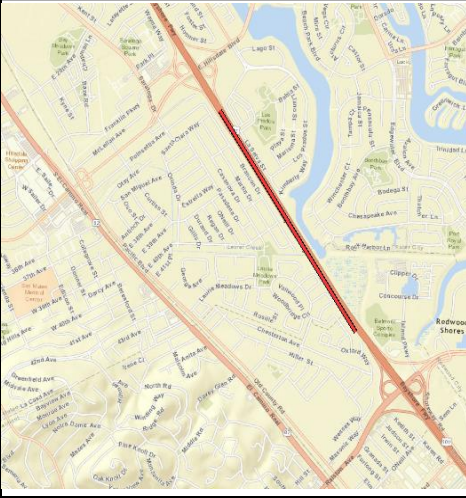
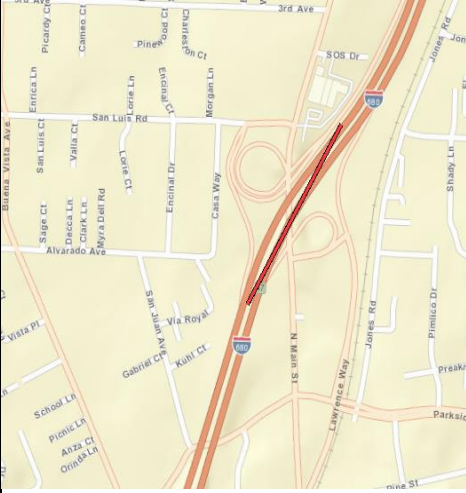
Table 2 Profile of top 15 highway freight impact bottlenecks in the San Francisco region

	<b>I-80 SF Bay Bridge</b>	Length (mile)	4.73
		Direction	East
		County	San Francisco
		City	San Francisco
		Average total volume	40,924
		Average truck volume	2,650
		Average share of trucks	6.47%
		Congestion speed (mile/h)	24.80
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	1,014,946
		Total peak hour all-vehicle delay (vehicle*hour)	2940.4
		Average peak hour freight congestion value (truck*mile/hour)	65,722
		Total peak hour freight delay (truck*hour)	190.4
	<b>I-80 Berkeley</b>	Length (mile)	2.98
		Direction	North
		County	Alameda
		City	Berkeley-Albany
		Average total volume	33,099
		Average truck volume	2,635
		Average share of trucks	7.95%
		Congestion speed (mile/h)	32.10
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	760,988
		Total peak hour all-vehicle delay (vehicle*hour)	1295.1
		Average peak hour freight congestion value (truck*mile/hour)	60,582
		Total peak hour freight delay (truck*hour)	103.1
	<b>US-101 South Bay</b>	Length (mile)	3.39
		Direction	South
		County	San Mateo
		City	Palo Alto
		Average total volume	23,329
		Average truck volume	2,738
		Average share of trucks	11.76%
		Congestion speed (mile/h)	36.30
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	441,939
		Total peak hour all-vehicle delay (vehicle*hour)	856.3
		Average peak hour freight congestion value (truck*mile/hour)	51,868
		Total peak hour freight delay (truck*hour)	100.5

<b>I-880 Union City</b> 	Length (mile)	2.36
	Direction	South
	County	Alameda
	City	Union City
	Average total volume	25,053
	Average truck volume	1,665
	Average share of trucks	6.64%
	Congestion speed (mile/h)	35.32
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	507,229
	Total peak hour all-vehicle delay (vehicle*hour)	779.4
	Average peak hour freight congestion value (truck*mile/hour)	33,710
	Total peak hour freight delay (truck*hour)	51.8
<b>I-680 Fremont</b> 	Length (mile)	0.92
	Direction	North
	County	Alameda
	City	Fremont
	Average total volume	27,523
	Average truck volume	2,127
	Average share of trucks	7.73%
	Congestion speed (mile/h)	23.40
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	870,565
	Total peak hour all-vehicle delay (vehicle*hour)	622.4
<b>I-680 Walnut Creek</b> 	Average peak hour freight congestion value (truck*mile/hour)	67,278
	Total peak hour freight delay (truck*hour)	48.1
	Length (mile)	0.31
	Direction	South/North
	County	Contra Costa
	City	Walnut Creek
	Average total volume	40,389
	Average truck volume	2,048
	Average share of trucks	5.07%
	Congestion speed (mile/h)	31.50
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	679,573
	Total peak hour all-vehicle delay (vehicle*hour)	621.2
	Average peak hour freight congestion value (turck*mile/hour)	34,459
	Total peak hour freight delay (turck*hour)	31.5



	<b>SR-24 Oakland</b>	Length (mile)	0.96
		Direction	East
		County	Alameda
		City	Oakland
		Average total volume	18,527
		Average truck volume	1,432
		Average share of trucks	7.73%
		Congestion speed (mile/h)	23.40
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	586,550
		Total peak hour all-vehicle delay (vehicle*hour)	438.6
		Average peak hour freight congestion value (truck*mile/hour)	45,336
		Total peak hour freight delay (truck*hour)	33.9
	<b>I-880 @ SR-92</b>	Length (mile)	1.34
		Direction	South
		County	Alameda
		City	Haywood
		Average total volume	26,541
		Average truck volume	1,779
		Average share of trucks	6.69%
		Congestion speed (mile/h)	34.70
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	546,589
		Total peak hour all-vehicle delay (vehicle*hour)	393.9
		Average peak hour freight congestion value (truck*mile/hour)	36,637
		Total peak hour freight delay (truck*hour)	26.4
	<b>SR-237@I-880</b>	Length (mile)	0.72
		Direction	East
		County	Santa Clara
		City	Milpitas
		Average total volume	18,401
		Average truck volume	1,630
		Average share of trucks	8.85%
		Congestion speed (mile/h)	21.80
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	610,891
		Total peak hour all-vehicle delay (vehicle*hour)	366.9
		Average peak hour freight congestion value (truck*mile/hour)	54,114
		Total peak hour freight delay (truck*hour)	32.5

	<b>US-101 San Francisco</b>	Length (mile)	0.96
		Direction	South
		County	San Francisco
		City	San Francisco
		Average total volume	30,416
		Average truck volume	2,581
		Average share of trucks	8.48%
		Congestion speed (mile/h)	36.70
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	558,471
		Total peak hour all-vehicle delay (vehicle*hour)	266.3
		Average peak hour freight congestion value (truck*mile/hour)	47,390
		Total peak hour freight delay (truck*hour)	22.6
	<b>US-101 San Mateo</b>	Length (mile)	1.06
		Direction	South
		County	San Mateo
		City	San Mateo
		Average total volume	29,770
		Average truck volume	2,617
		Average share of trucks	8.79%
		Congestion speed (mile/h)	40.30
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	438,894
		Total peak hour all-vehicle delay (vehicle*hour)	210.4
		Average peak hour freight congestion value (turck*mile/hour)	38,582
		Total peak hour freight delay (turck*hour)	18.5
	<b>I-680 Alamo</b>	Length (mile)	1.74
		Direction	North
		County	Contra Costa
		City	Alamo
		Average total volume	24,612
		Average truck volume	1,705
		Average share of trucks	6.93%
		Congestion speed (mile/h)	34.70
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	696,772
		Total peak hour all-vehicle delay (vehicle*hour)	124.1
		Average peak hour freight congestion value (truck*mile/hour)	48,269
		Total peak hour freight delay (truck*hour)	8.6



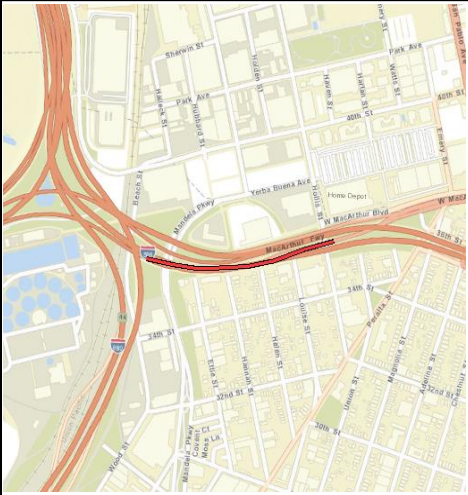
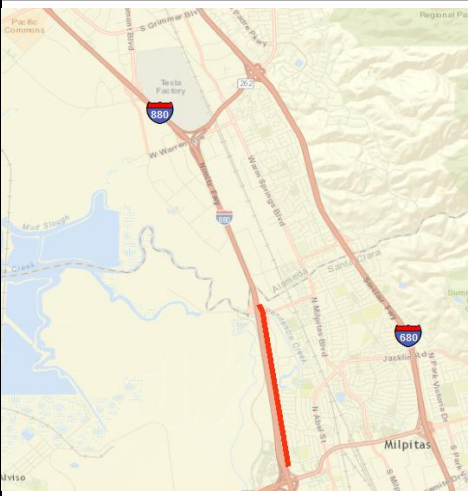
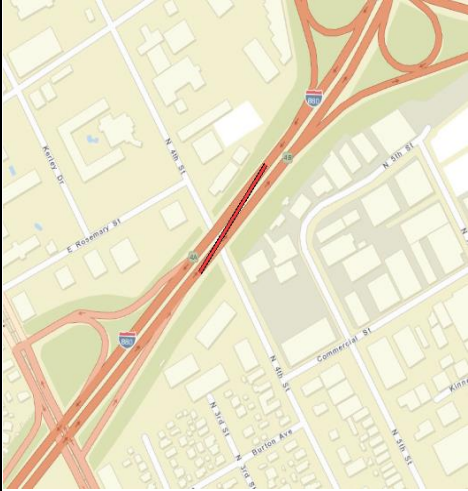
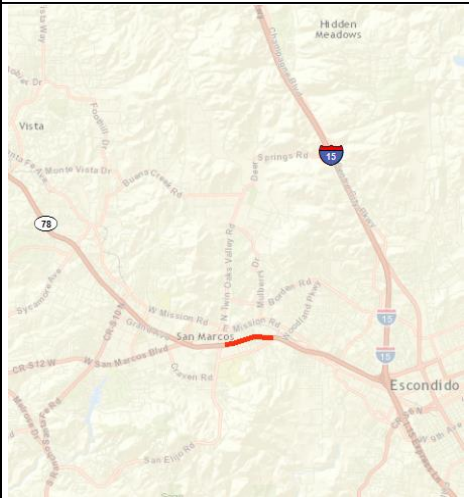
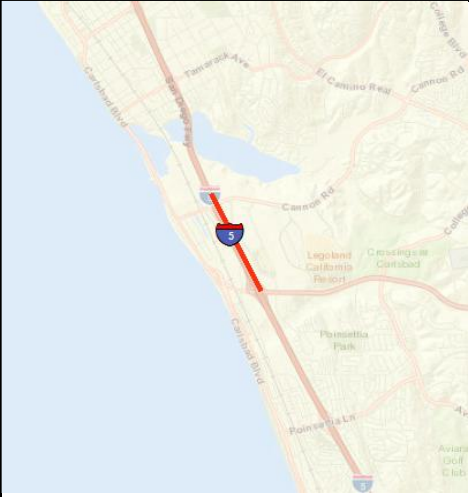
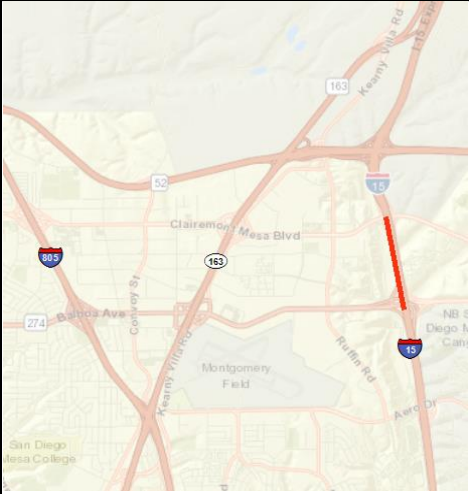
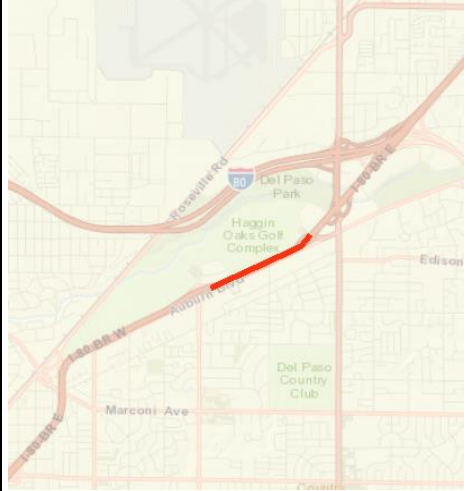
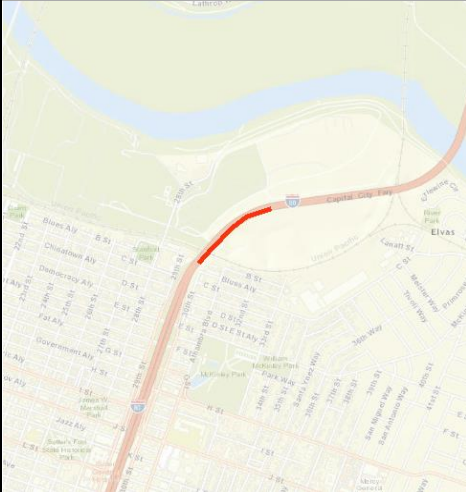
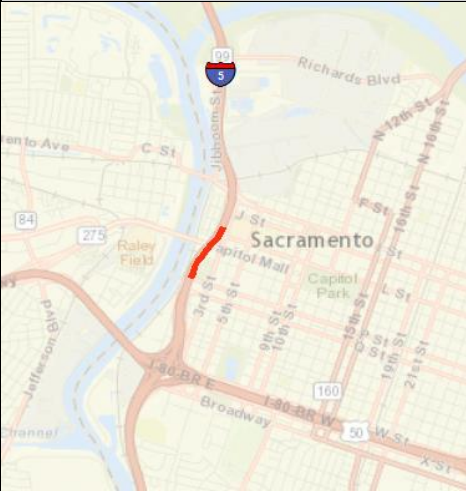
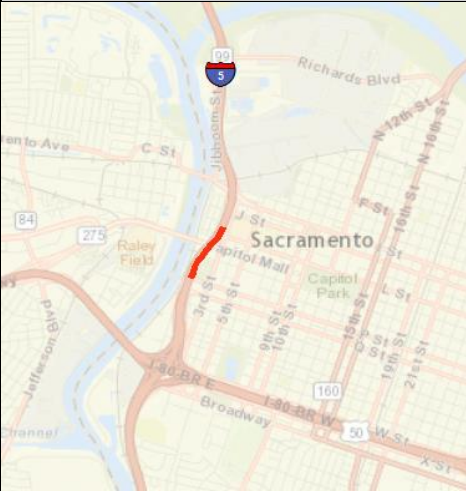
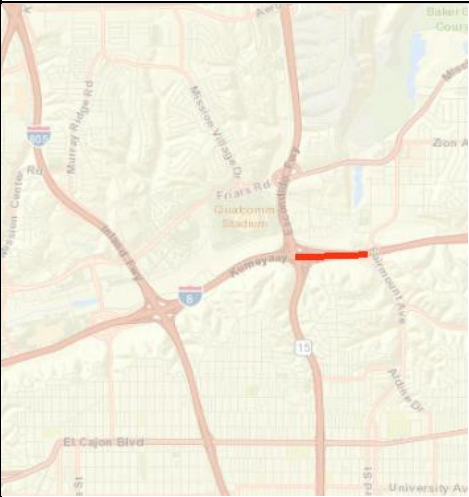

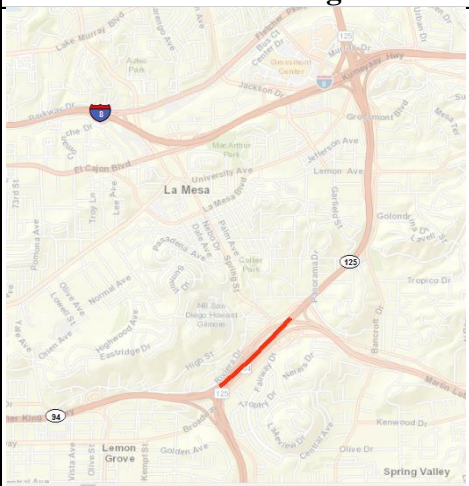
	<b>I-580 @ I-80</b>	Length (mile)	0.21
		Direction	East
		County	Alameda
		City	Oakland
		Average total volume	33,302
		Average truck volume	1,773
		Average share of trucks	5.32%
		Congestion speed (mile/h)	28.90
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	870,228
		Total peak hour all-vehicle delay (vehicle*hour)	114.6
		Average peak hour freight congestion value (truck*mile/hour)	46,331
		Total peak hour freight delay (truck*hour)	6.1
	<b>I-880 Milpitas</b>	Length (mile)	2.07
		Direction	North
		County	Santa Clara
		City	Milpitas
		Average total volume	30,873
		Average truck volume	2,880
		Average share of trucks	9.32%
		Congestion speed (mile/h)	45.00
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	301,151
		Total peak hour all-vehicle delay (vehicle*hour)	108.3
		Average peak hour freight congestion value (truck*mile/hour)	28,093
		Total peak hour freight delay (truck*hour)	10.1
	<b>I-880@US-101</b>	Length (mile)	0.13
		Direction	South
		County	Santa Clara
		City	Santa Clara
		Average total volume	25,694
		Average truck volume	2,262
		Average share of trucks	8.80%
		Congestion speed (mile/h)	28.21
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	688,524
		Total peak hour all-vehicle delay (vehicle*hour)	57.9
		Average peak hour freight congestion value (truck*mile/hour)	60,615
		Total peak hour freight delay (truck*hour)	5.1

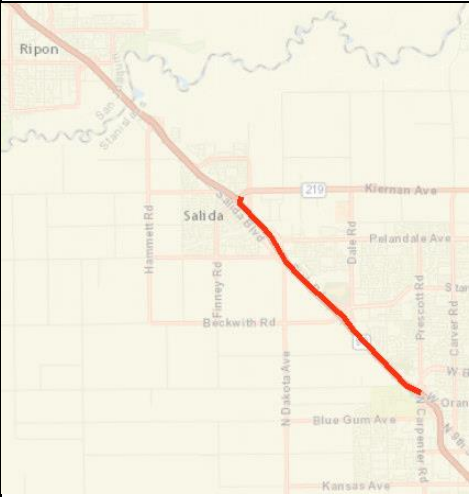

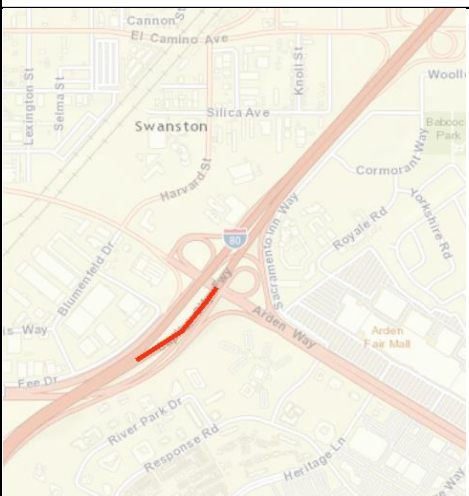
Table 3 Profile of top 15 highway freight impact bottlenecks in the rest of CA

<b>SR-78 San Marcos</b>	Length (mile)	1.84
	Direction	East
	County	San Diego
	City	San Marcos
	Average total volume	4,504
	Average truck volume	168
	Average share of trucks	3.74%
	Congestion speed (mile/h)	34.70
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	87,598
	Total peak hour all-vehicle delay (vehicle*hour)	88.1
	Average peak hour freight congestion value (truck*mile/hour)	3,273
	Total peak hour freight delay (truck*hour)	3.3
<b>I-5 San Diego</b>	Length (mile)	0.94
	Direction	North
	County	San Diego
	City	San Diego
	Average total volume	5,617
	Average truck volume	179
	Average share of trucks	3.13%
	Congestion speed (mile/h)	28.97
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	145,864
	Total peak hour all-vehicle delay (vehicle*hour)	86.2
	Average peak hour freight congestion value (truck*mile/hour)	4,655
	Total peak hour freight delay (truck*hour)	2.8
<b>I-15 San Diego</b>	Length (mile)	0.37
	Direction	South
	County	San Diego
	City	San Diego
	Average total volume	5,731
	Average truck volume	168
	Average share of trucks	2.95%
	Congestion speed (mile/h)	23.40
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	181,639
	Total peak hour all-vehicle delay (vehicle*hour)	52.1
	Average peak hour freight congestion value (truck*mile/hour)	5,328
	Total peak hour freight delay (truck*hour)	1.5



<b>I-80 Bridge West Sacramento</b> 	Length (mile)	0.70
	Direction	North
	County	Sacramento
	City	Sacramento
	Average total volume	4,502
	Average truck volume	66
	Average share of trucks	1.47%
	Congestion speed (mile/h)	33.57
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	99,687
	Total peak hour all-vehicle delay (vehicle*hour)	36.5
	Average peak hour freight congestion value (truck*mile/hour)	1,457
	Total peak hour freight delay (truck*hour)	0.5
<b>I-80 Sacramento central</b> 	Length (mile)	0.50
	Direction	North
	County	Sacramento
	City	Sacramento
	Average total volume	4,435
	Average truck volume	283
	Average share of trucks	6.69%
	Congestion speed (mile/h)	30.02
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	121,182
	Total peak hour all-vehicle delay (vehicle*hour)	33.6
<b>I-5 Sacramento</b> 	Average peak hour freight congestion value (truck*mile/hour)	7,723
	Total peak hour freight delay (truck*hour)	2.1
	Length (mile)	0.32
	Direction	North
	County	Sacramento
	City	Sacramento
	Average total volume	5,424
	Average truck volume	113
	Average share of trucks	1.85%
	Congestion speed (mile/h)	26.95
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	130,023
	Total peak hour all-vehicle delay (vehicle*hour)	32.9
	Average peak hour freight congestion value (truck*mile/hour)	2,720
	Total peak hour freight delay (truck*hour)	0.7

	<b>I-8 San Diego</b>	Length (mile)	0.42
		Direction	South
		County	San Diego
		City	San Diego
		Average total volume	6,042
		Average truck volume	83
		Average share of trucks	1.37%
		Congestion speed (mile/h)	32.73
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	134,525
		Total peak hour all-vehicle delay (vehicle*hour)	31.0
		Average peak hour freight congestion value (truck*mile/hour)	1,844
		Total peak hour freight delay (truck*hour)	0.4
	<b>SR-65 Roseville</b>	Length (mile)	0.24
		Direction	South
		County	Placer
		City	Roseville
		Average total volume	2,742
		Average truck volume	145
		Average share of trucks	5.20%
		Congestion speed (mile/h)	28.80
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	72,075
		Total peak hour all-vehicle delay (vehicle*hour)	10.8
		Average peak hour freight congestion value (truck*mile/hour)	3,803
		Total peak hour freight delay (truck*hour)	0.6
	<b>SR-125 San Diego</b>	Length (mile)	0.16
		Direction	South
		County	San Diego
		City	La Mesa
		Average total volume	5,836
		Average truck volume	225
		Average share of trucks	3.83%
		Congestion speed (mile/h)	35.25
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	117,706
		Total peak hour all-vehicle delay (vehicle*hour)	9.6
		Average peak hour freight congestion value (truck*mile/hour)	4,538
		Total peak hour freight delay (truck*hour)	0.4

	<b>SR-99 Salida/Modesto</b>	Length (mile)	4.35
		Direction	West
		County	Stanislaus
		City	Salida-Modesto
		Average total volume	1,243
		Average truck volume	160
		Average share of trucks	12.21%
		Congestion speed (mile/h)	50.50
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	8,056
		Total peak hour all-vehicle delay (vehicle*hour)	8.8
		Average peak hour freight congestion value (truck*mile/hour)	1,035
		Total peak hour freight delay (truck*hour)	1.1
	<b>I-80 Exposition Sacramento</b>	Length (mile)	0.09
		Direction	South
		County	Sacramento
		City	Sacramento
		Average total volume	4,751
		Average truck volume	163
		Average share of trucks	3.31%
		Congestion speed (mile/h)	27.05
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	122,933
		Total peak hour all-vehicle delay (vehicle*hour)	8.0
	<b>I-80 Arden Sacramento</b>	Length (mile)	0.38
		Direction	North
		County	Sacramento
		City	Sacramento
		Average total volume	3,505
		Average truck volume	257
		Average share of trucks	10.98%
		Congestion speed (mile/h)	45.12
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	44,536
		Total peak hour all-vehicle delay (vehicle*hour)	5.3
		Average peak hour freight congestion value (truck*mile/hour)	3,268
		Total peak hour freight delay (truck*hour)	0.4

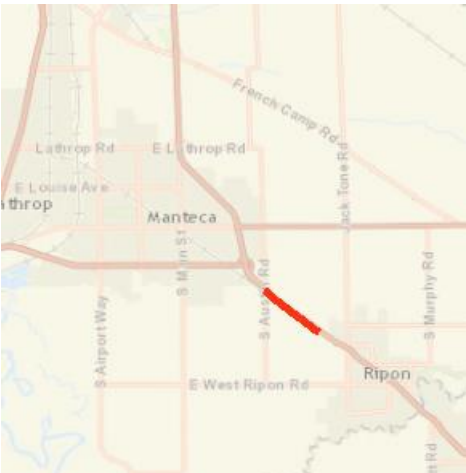
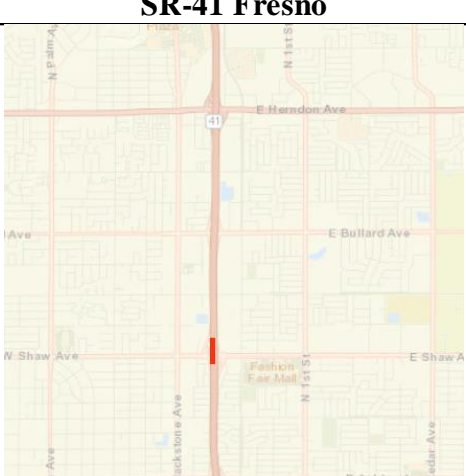
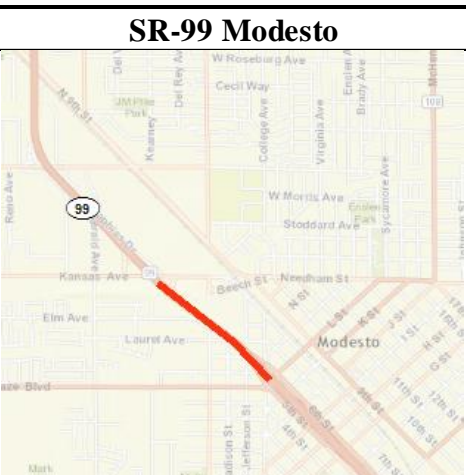
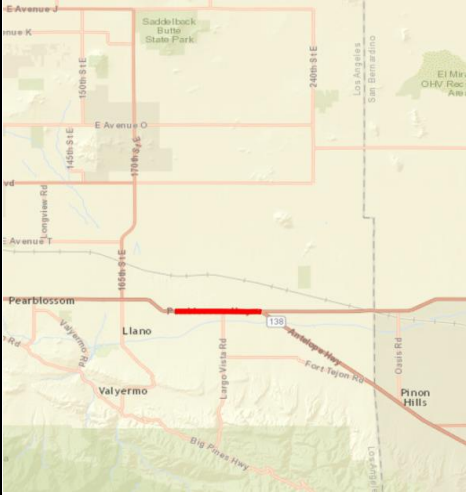
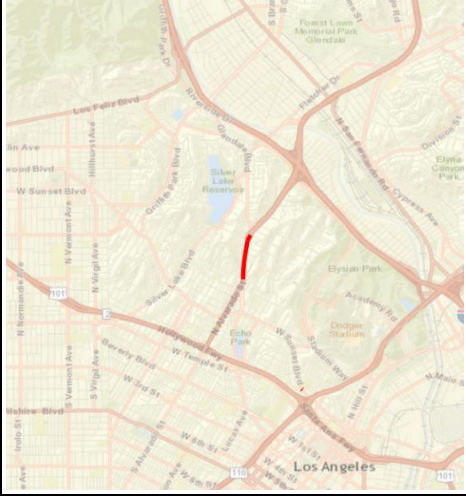
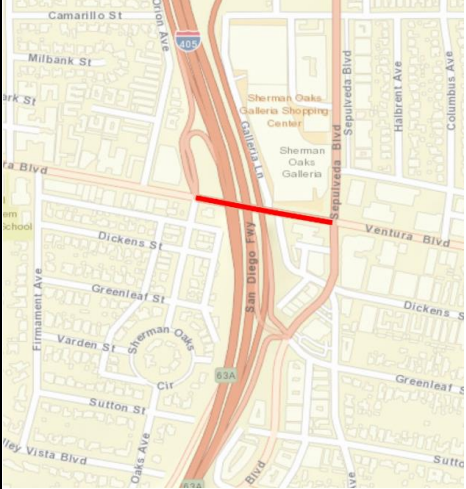
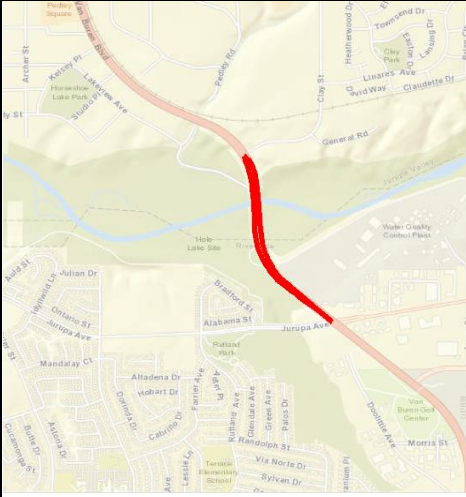
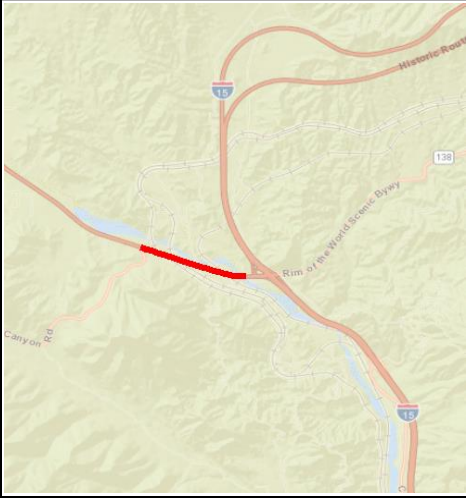
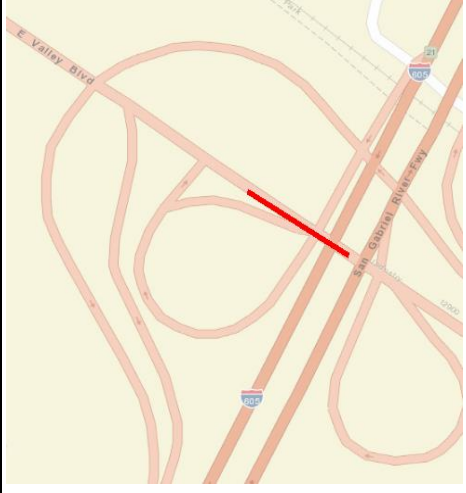
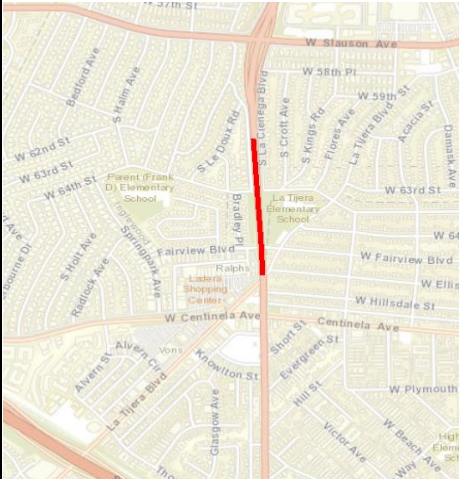
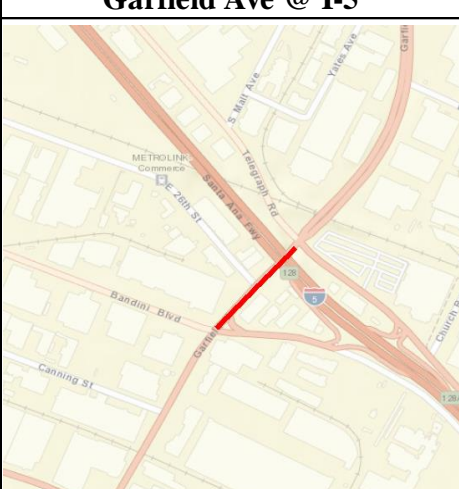
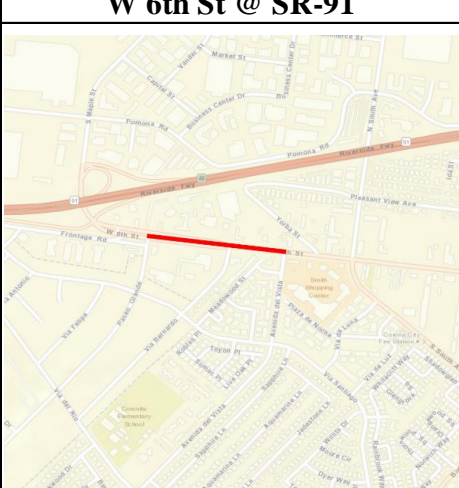
	<b>SR-99 Manteca</b>	Length (mile)	0.85
		Direction	South
		County	Stanislaus
		City	Manteca
		Average total volume	3,740
		Average truck volume	297
		Average share of trucks	8.23%
		Congestion speed (mile/h)	51.95
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	7,620
		Total peak hour all-vehicle delay (vehicle*hour)	3.4
		Average peak hour freight congestion value (truck*mile/hour)	605
		Total peak hour freight delay (truck*hour)	0.3
	<b>SR-41 Fresno</b>	Length (mile)	0.08
		Direction	South
		County	Fresno
		City	Fresno
		Average total volume	4,272
		Average truck volume	231
		Average share of trucks	5.28%
		Congestion speed (mile/h)	46.65
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	36,212
		Total peak hour all-vehicle delay (vehicle*hour)	1.1
		Average peak hour freight congestion value (truck*mile/hour)	1,961
		Total peak hour freight delay (truck*hour)	0.1
	<b>SR-99 Modesto</b>	Length (mile)	0.51
		Direction	South
		County	Stanislaus
		City	Modesto
		Average total volume	4,791
		Average truck volume	427
		Average share of trucks	8.90%
		Congestion speed (mile/h)	53.72
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	14,680
		Total peak hour all-vehicle delay (vehicle*hour)	1.1
		Average peak hour freight congestion value (truck*mile/hour)	1,308
		Total peak hour freight delay (truck*hour)	0.1



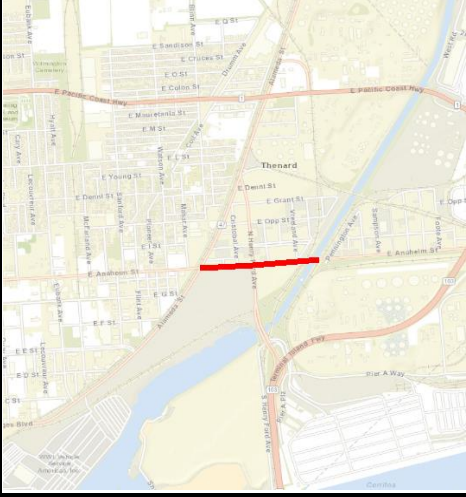
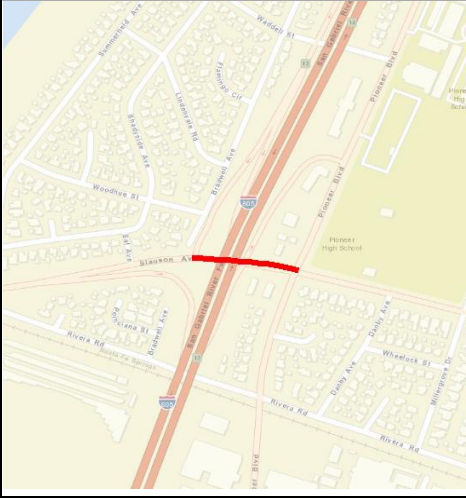
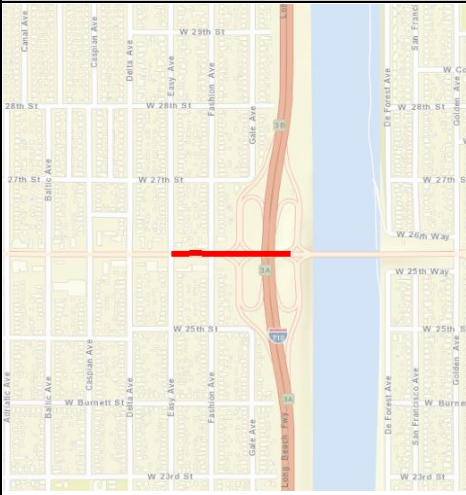
Table 4 Profile of top 15 arterial freight impact bottlenecks in the Los Angeles region

	<b>Ave W @ State Highway 138</b>	Length (mile)	3.43
		Direction	East
		County	Los Angeles
		City	Unincorporated
		Average total volume	4,163
		Average truck volume	259
		Average share of trucks	6.22%
		Congestion speed (mile/h)	6.70
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	180,231
		Total peak hour all-vehicle delay (vehicle*hour)	1735.9
		Average peak hour freight congestion value (truck*mile/hour)	11,213
		Total peak hour freight delay (truck*hour)	108
	<b>Glendale Blvd @ N Alvarado St</b>	Length (mile)	0.52
		Direction	North
		County	Los Angeles
		City	Los Angeles
		Average total volume	19,503
		Average truck volume	544
		Average share of trucks	2.79%
		Congestion speed (mile/h)	5.60
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	526,689
		Total peak hour all-vehicle delay (vehicle*hour)	1351.6
		Average peak hour freight congestion value (truck*mile/hour)	14,691
		Total peak hour freight delay (truck*hour)	37.7
	<b>Ventura Blvd @ I-405</b>	Length (mile)	0.16
		Direction	East
		County	Los Angeles
		City	Los Angeles
		Average total volume	11,654
		Average truck volume	750
		Average share of trucks	6.44%
		Congestion speed (mile/h)	5.40
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	275,205
		Total peak hour all-vehicle delay (vehicle*hour)	1199.6
		Average peak hour freight congestion value (truck*mile/hour)	17,711
		Total peak hour freight delay (truck*hour)	77.2

<b>Van Buren Blvd @ Jurupa Ave</b> 	Length (mile)	1.31
	Direction	South
	County	Riverside
	City	Riverside
	Average total volume	15,560
	Average truck volume	322
	Average share of trucks	2.07%
	Congestion speed (mile/h)	13.50
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	549,094
	Total peak hour all-vehicle delay (vehicle*hour)	1024.4
	Average peak hour freight congestion value (truck*mile/hour)	11,363
	Total peak hour freight delay (truck*hour)	21.2
<b>State Highway 138</b> 	Length (mile)	1.02
	Direction	East
	County	San Bernardino
	City	Unincorporated
	Average total volume	3,406
	Average truck volume	426
	Average share of trucks	12.51%
	Congestion speed (mile/h)	5.10
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	173,298
	Total peak hour all-vehicle delay (vehicle*hour)	617.2
<b>Valley Blvd @ I-605</b> 	Average peak hour freight congestion value (truck*mile/hour)	21,675
	Total peak hour freight delay (truck*hour)	77.2
	Length (mile)	0.13
	Direction	East
	County	Los Angeles
	City	El Monte
	Average total volume	10,383
	Average truck volume	407
	Average share of trucks	3.92%
	Congestion speed (mile/h)	5.00
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	293,581
	Total peak hour all-vehicle delay (vehicle*hour)	234.7
	Average peak hour freight congestion value (truck*mile/hour)	11,508
	Total peak hour freight delay (truck*hour)	9.2

<b>S La Cienega Blvd @ Fairview Blvd</b>	Length (mile)	0.36
	Direction	North
	County	Los Angeles
	City	Los Angeles
	Average total volume	13,619
	Average truck volume	337
	Average share of trucks	2.47%
	Congestion speed (mile/h)	14.20
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	429,302
	Total peak hour all-vehicle delay (vehicle*hour)	234.4
	Average peak hour freight congestion value (truck*mile/hour)	10,623
Total peak hour freight delay (truck*hour)	5.8	
<b>Garfield Ave @ I-5</b>	Length (mile)	0.15
	Direction	North
	County	Los Angeles
	City	Commerce
	Average total volume	9,512
	Average truck volume	343
	Average share of trucks	3.61%
	Congestion speed (mile/h)	5.40
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	284,889
	Total peak hour all-vehicle delay (vehicle*hour)	230.2
	Average peak hour freight congestion value (truck*mile/hour)	10,273
Total peak hour freight delay (truck*hour)	8.3	
<b>W 6th St @ SR-91</b>	Length (mile)	0.27
	Direction	East
	County	Riverside
	City	Corona
	Average total volume	9,400
	Average truck volume	323
	Average share of trucks	3.44%
	Congestion speed (mile/h)	10.00
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	345,326
	Total peak hour all-vehicle delay (vehicle*hour)	224.1
	Average peak hour freight congestion value (truck*mile/hour)	11,866
Total peak hour freight delay (truck*hour)	7.7	



<b>E Anaheim St @ Alameda St</b> 	Length (mile)	0.46
	Direction	East
	County	Los Angeles
	City	Los Angeles
	Average total volume	7,960
	Average truck volume	499
	Average share of trucks	6.22%
	Congestion speed (mile/h)	16.90
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	171,754
	Total peak hour all-vehicle delay (vehicle*hour)	161.1
	Average peak hour freight congestion value (truck*mile/hour)	10,767
	Total peak hour freight delay (truck*hour)	10.1
<b>Slauson Ave @ I-605</b> 	Length (mile)	0.10
	Direction	East
	County	Los Angeles
	City	West Whittier-Los Nietos
	Average total volume	9,460
	Average truck volume	335
	Average share of trucks	3.54%
	Congestion speed (mile/h)	5.30
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	284,817
	Total peak hour all-vehicle delay (vehicle*hour)	158.1
<b>W Willow St @ Fashion Ave</b> 	Average peak hour freight congestion value (truck*mile/hour)	10,086
	Total peak hour freight delay (truck*hour)	5.6
	Length (mile)	0.18
	Direction	East
	County	Long Beach
	City	Long Beach
	Average total volume	8,989
	Average truck volume	476
	Average share of trucks	5.32%
	Congestion speed (mile/h)	9.10
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	201,157
	Total peak hour all-vehicle delay (vehicle*hour)	134.1
	Average peak hour freight congestion value (truck*mile/hour)	10,652
	Total peak hour freight delay (truck*hour)	7.1



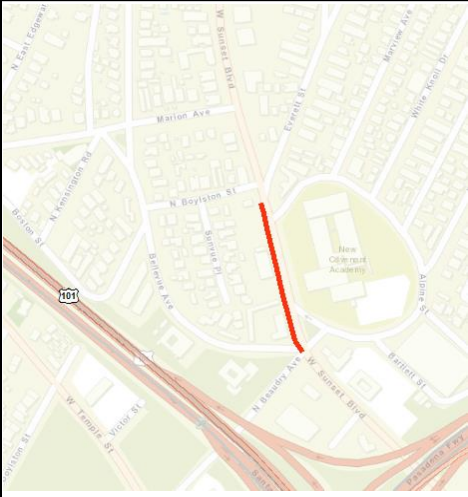
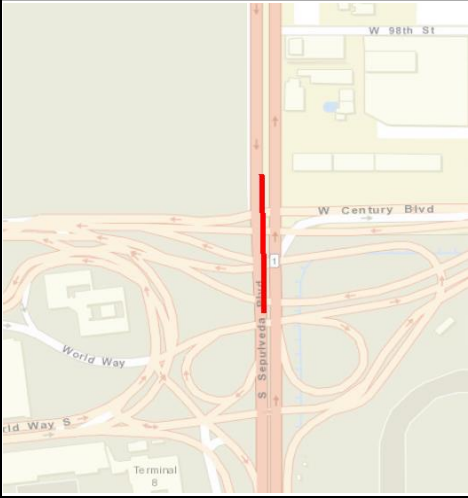


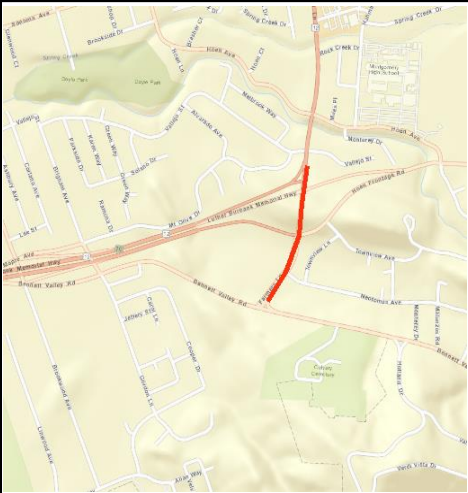
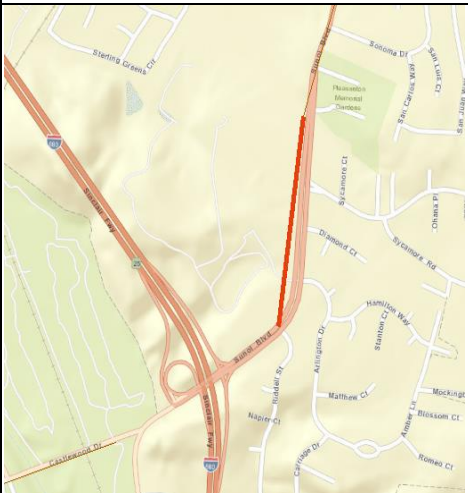
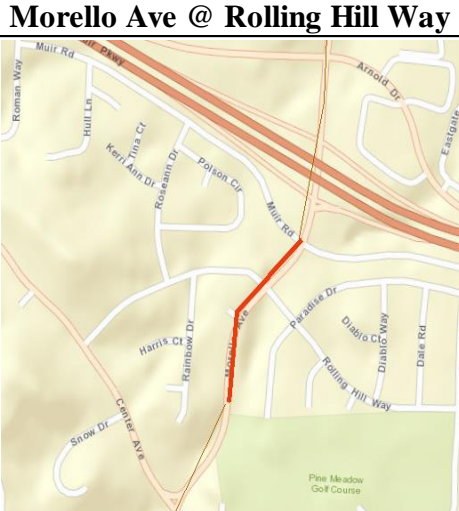

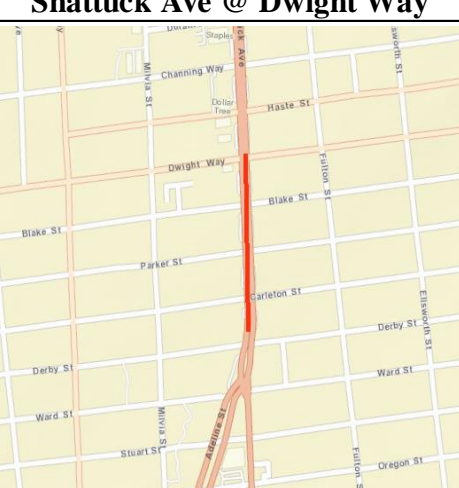
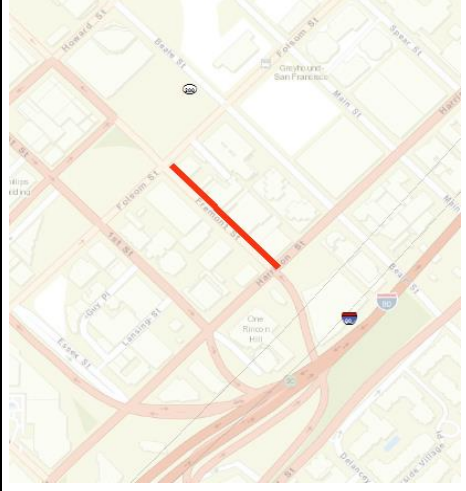

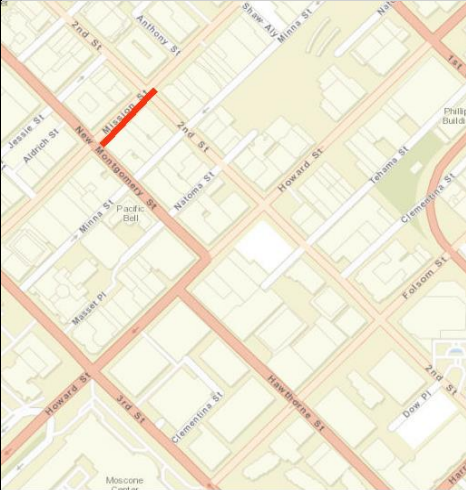
<b>W Sunset Blvd @ N Beaudry Ave</b>	Length (mile)	0.13
	Direction	North
	County	Los Angeles
	City	Los Angeles
	Average total volume	11,959
	Average truck volume	414
	Average share of trucks	3.48%
	Congestion speed (mile/h)	4.49
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	265,582
	Total peak hour all-vehicle delay (vehicle*hour)	60.7
	Average peak hour freight congestion value (truck*mile/hour)	9,194
	Total peak hour freight delay (truck*hour)	2.1
<b>S Sepulveda Blvd @ W Century Blvd</b>	Length (mile)	0.09
	Direction	South
	County	Los Angeles
	City	Los Angeles
	Average total volume	15,749
	Average truck volume	578
	Average share of trucks	3.67%
	Congestion speed (mile/h)	14.10
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	301,166
	Total peak hour all-vehicle delay (vehicle*hour)	59.9
	Average peak hour freight congestion value (truck*mile/hour)	11,053
	Total peak hour freight delay (truck*hour)	2.2
<b>E Florence Ave @ Eastern Ave</b>	Length (mile)	0.04
	Direction	East
	County	Los Angeles
	City	Bell Gardens
	Average total volume	9,191
	Average truck volume	406
	Average share of trucks	4.42%
	Congestion speed (mile/h)	5.30
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	256,397
	Total peak hour all-vehicle delay (vehicle*hour)	54.3
	Average peak hour freight congestion value (truck*mile/hour)	11,326
	Total peak hour freight delay (truck*hour)	2.4

Table 5 Profile of top 15 arterial freight impact bottlenecks in the San Francisco region



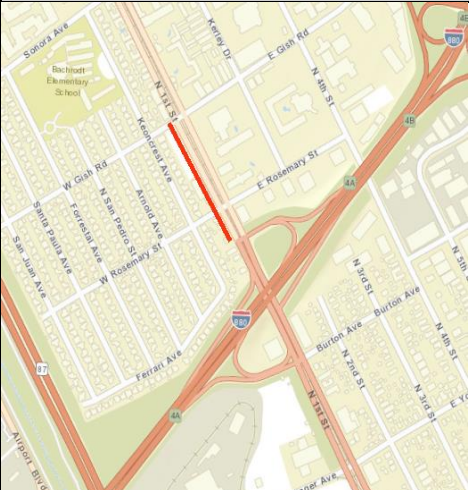
	<b>Stony Point Rd @ Hearn Ave</b>	Length (mile)	0.65
		Direction	South
		County	Sonoma
		City	Santa Rosa
		Average total volume	4,701
		Average truck volume	224
		Average share of trucks	4.77%
		Congestion speed (mile/h)	8.03
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	150,642
		Total peak hour all-vehicle delay (vehicle*hour)	304.3
		Average peak hour freight congestion value (truck*mile/hour)	7,178
		Total peak hour freight delay (truck*hour)	14.5
	<b>Farmers Ln @ SR-12</b>	Length (mile)	0.33
		Direction	South
		County	Sonoma
		City	Santa Rosa
		Average total volume	8,081
		Average truck volume	411
		Average share of trucks	5.09%
		Congestion speed (mile/h)	12.96
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	137,790
		Total peak hour all-vehicle delay (vehicle*hour)	116.0
		Average peak hour freight congestion value (truck*mile/hour)	7,008
		Total peak hour freight delay (truck*hour)	5.9
	<b>Sunol Blvd @ I-580</b>	Length (mile)	0.42
		Direction	North
		County	Alameda
		City	Pleasanton
		Average total volume	4,285
		Average truck volume	432
		Average share of trucks	10.09%
		Congestion speed (mile/h)	12.35
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	97,147
		Total peak hour all-vehicle delay (vehicle*hour)	94.2
		Average peak hour freight congestion value (truck*mile/hour)	9,794
		Total peak hour freight delay (truck*hour)	9.5

<b>Morello Ave @ Rolling Hill Way</b>	Length (mile)	0.17
	Direction	North
	County	Contra Costa
	City	Martinez
	Average total volume	4,344
	Average truck volume	355
	Average share of trucks	8.18%
	Congestion speed (mile/h)	6.92
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	122,232
	Total peak hour all-vehicle delay (vehicle*hour)	85.7
	Average peak hour freight congestion value (truck*mile/hour)	9,989
	Total peak hour freight delay (truck*hour)	7.0
<b>Bay Farm Island Bridge</b>	Length (mile)	0.32
	Direction	South
	County	Alameda
	City	Alameda
	Average total volume	1,557
	Average truck volume	277
	Average share of trucks	6.10%
	Congestion speed (mile/h)	6.02
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	46,744
	Total peak hour all-vehicle delay (vehicle*hour)	70.8
	Average peak hour freight congestion value (truck*mile/hour)	8,316
	Total peak hour freight delay (truck*hour)	12.6
<b>Shattuck Ave @ Dwight Way</b>	Length (mile)	0.33
	Direction	South
	County	Alameda
	City	Berkeley
	Average total volume	7,819
	Average truck volume	689
	Average share of trucks	8.81%
	Congestion speed (mile/h)	18.27
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	82,003
	Total peak hour all-vehicle delay (vehicle*hour)	55.3
	Average peak hour freight congestion value (truck*mile/hour)	7,226
	Total peak hour freight delay (truck*hour)	4.87



<b>Fremont St @ Harrison St</b> 	Length (mile)	0.11
	Direction	North
	County	San Francisco
	City	San Francisco
	Average total volume	7,850
	Average truck volume	1,165
	Average share of trucks	14.85%
	Congestion speed (mile/h)	17.34
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	60,165
	Total peak hour all-vehicle delay (vehicle*hour)	16.2
	Average peak hour freight congestion value (truck*mile/hour)	8,929
	Total peak hour freight delay (truck*hour)	2.4
<b>W Santa Clara St @ Notre Dame Ave</b> 	Length (mile)	0.08
	Direction	West
	County	Santa Clara
	City	San Jose
	Average total volume	7,497
	Average truck volume	921
	Average share of trucks	12.29%
	Congestion speed (mile/h)	16.84
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	61,205
	Total peak hour all-vehicle delay (vehicle*hour)	11.4
<b>Mission Street @ New Montgomery St</b> 	Average peak hour freight congestion value (truck*mile/hour)	7,519
	Total peak hour freight delay (truck*hour)	1.4
	Length (mile)	0.06
	Direction	South
	County	San Francisco
	City	San Francisco
	Average total volume	3,962
	Average truck volume	965
	Average share of trucks	24.36%
	Congestion speed (mile/h)	13.21
	Average peak hour all-vehicle congestion value (vehicle*mile/hour)	45,889
	Total peak hour all-vehicle delay (vehicle*hour)	7.8
	Average peak hour freight congestion value (truck*mile/hour)	11,177
	Total peak hour freight delay (truck*hour)	1.9



	<b>Masonic Ave @ Felt St</b>	Length (mile)	0.07
		Direction	South
		County	San Francisco
		City	San Francisco
		Average total volume	8,043
		Average truck volume	432
		Average share of trucks	5.39%
		Congestion speed (mile/h)	10.17
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	139,282
		Total peak hour all-vehicle delay (vehicle*hour)	35.4
		Average peak hour freight congestion value (truck*mile/hour)	7,481
		Total peak hour freight delay (truck*hour)	1.9
	<b>Market St @ 3rd St</b>	Length (mile)	0.31
		Direction	North
		County	San Francisco
		City	San Francisco
		Average total volume	11,490
		Average truck volume	2,228
		Average share of trucks	19.39%
		Congestion speed (mile/h)	20.70
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	49,410
		Total peak hour all-vehicle delay (vehicle*hour)	32.0
		Average peak hour freight congestion value (truck*mile/hour)	9,581
		Total peak hour freight delay (truck*hour)	6.2
	<b>N 1st St @ W Rosemary St</b>	Length (mile)	0.11
		Direction	North
		County	Santa Clara
		City	San Jose
		Average total volume	7,978
		Average truck volume	623
		Average share of trucks	7.80%
		Congestion speed (mile/h)	15.11
		Average peak hour all-vehicle congestion value (vehicle*mile/hour)	118,774
		Total peak hour all-vehicle delay (vehicle*hour)	28.2
		Average peak hour freight congestion value (truck*mile/hour)	9,275
		Total peak hour freight delay (truck*hour)	2.2


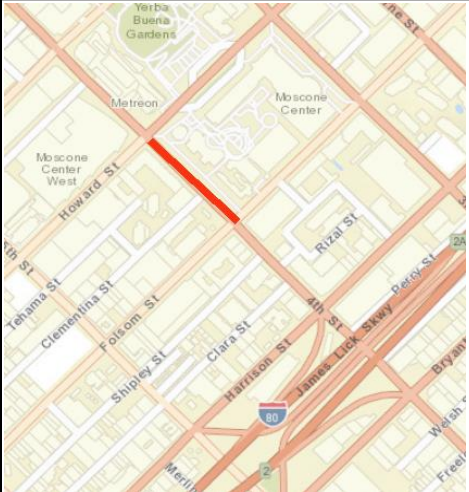
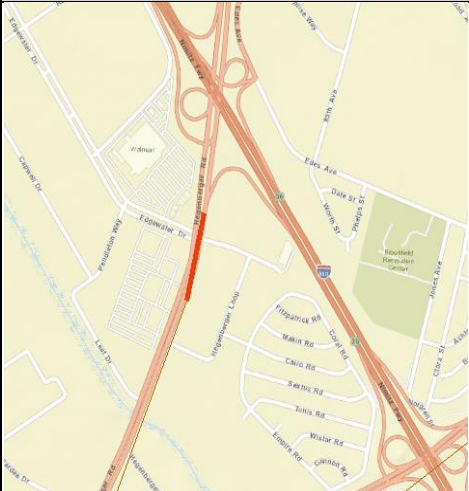
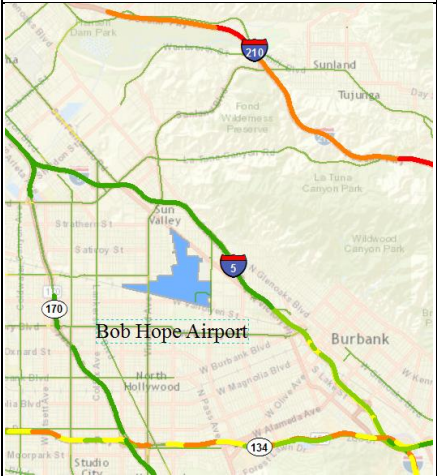
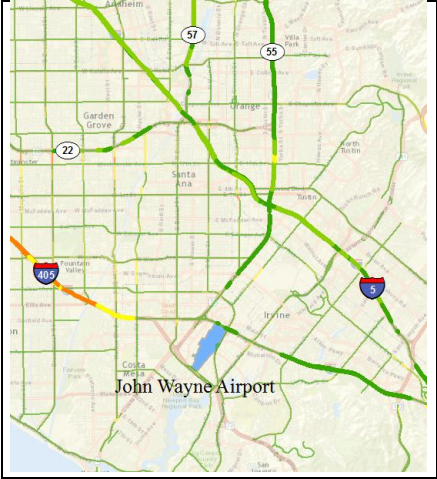
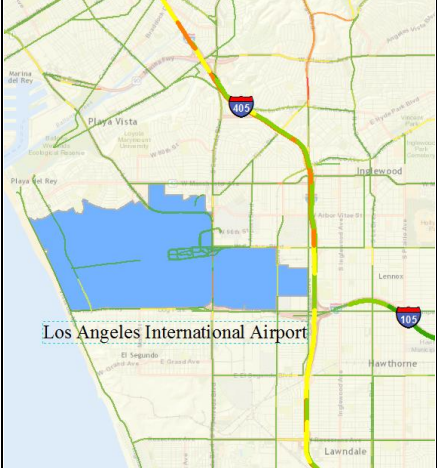
	<b>Ygnacio Valley Rd @ I-580</b>		Length (mile)	0.12
			Direction	West
			County	Contra Costa
			City	Walnut Creek
			Average total volume	8,053
			Average truck volume	458
			Average share of trucks	5.69%
			Congestion speed (mile/h)	11.25
			Average peak hour all-vehicle congestion value (vehicle*mile/hour)	151,143
			Total peak hour all-vehicle delay (vehicle*hour)	52.7
			Average peak hour freight congestion value (truck*mile/hour)	8,596
			Total peak hour freight delay (truck*hour)	3.0
	<b>4th Street @ Folsom St</b>		Length (mile)	0.12
			Direction	South
			County	San Francisco
			City	San Francisco
			Average total volume	15,673
			Average truck volume	2,653
			Average share of trucks	16.93%
			Congestion speed (mile/h)	16.51
			Average peak hour all-vehicle congestion value (vehicle*mile/hour)	132,940
			Total peak hour all-vehicle delay (vehicle*hour)	38.4
	<b>Hegenberger Rd @ Edgewater Dr</b>		Length (mile)	0.16
			Direction	North
			County	Alameda
			City	Oakland
			Average total volume	11,822
			Average truck volume	905
			Average share of trucks	7.66%
			Congestion speed (mile/h)	18.95
			Average peak hour all-vehicle congestion value (vehicle*mile/hour)	130,565
			Total peak hour all-vehicle delay (vehicle*hour)	36.6
			Average peak hour freight congestion value (truck*mile/hour)	9,995
			Total peak hour freight delay (truck*hour)	2.8

Table 6 *Freight impact areas in relation to major airports in the Los Angeles region*

Bob Hope Airport	2013 Short Tons of Air Cargo	53763
	Facilities and services	FedEx and USPS have drop boxes available at BUR.
	Trade characteristics	In 2013 FedEx and UPS together accounted for approximately 93% of total air cargo at BUR.
	Major freeway connection and bottlenecks involved	I-5, US-170, US-134 and I-210 are in close vicinity. <b>One of the top 15 freight bottlenecks in the region, which is on I-210 is about 5 miles away.</b>
John Wayne Airport	2013 Short Tons of Air Cargo	17827
	Facilities and services	/
	Trade characteristics	FedEx and UPS are the two all-cargo carriers at SNA with out-of-state destinations to Memphis, Tennessee and Louisville, Kentucky.
	Major freeway connection and bottlenecks involved	I-405, US-55, US-22, US-57 and I-5 are in close vicinity. The congestion on the I-405 is particularly severe. No top 15 highway or arterial freight bottlenecks are found in this region.
Los Angeles International Airport	2013 Short Tons of Air Cargo	1.9 million
	Facilities and services	Mercury Air Cargo operates the largest airport refrigeration and perishable center on the U.S. West Coast. FedEx has a major regional cargo center at LAX.
	Trade characteristics	More than 50 percent of air cargo activity is international in origin or destination.
	Major freeway connection and bottlenecks involved	I-405, and I-105 are in close vicinity. The congestion on the I-405 is particularly severe. <b>Two of the top 15 arterial freight bottlenecks are in the region.</b>



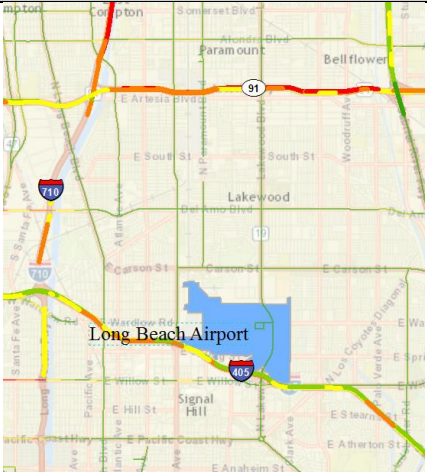
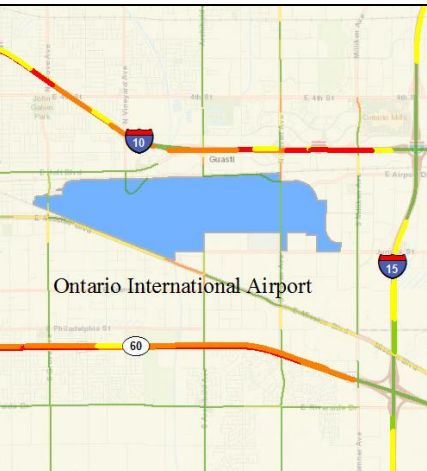
<p><b>Long Beach Airport</b></p> 	2013 Short Tons of Air Cargo	26858
<p>Facilities and services</p>		Air cargo carriers, FedEx and UPS operate service in and out of LGB.
<p>Trade characteristics</p>		FedEx and UPS transport most of the packages through LGB. Alaska Airlines, US Airways, and JetBlue also provide cargo services.
<p>Major freeway connection and bottlenecks involved</p>		I-710, CA-91, I-605 and I-405 are in close vicinity. <b>Four of the top 15 highway freight bottlenecks and one of the top 15 arterial freight bottlenecks are in the region.</b>
<p><b>Ontario International Airport</b></p> 	2013 Short Tons of Air Cargo	460500
<p>Facilities and services</p>		Major freight-only carriers that serve ONT include UPS, FedEx, Ameriflight, West Air, and Empire Airways.
<p>Trade characteristics</p>		In 2013, UPS and FedEx together processed over 97 percent of ONT air freight. Over 13 percent of ONT air cargo was international.
<p>Major freeway connection and bottlenecks involved</p>		I-10, CA-60, and I-15 are in close vicinity. The congestion on the I-10 and CA-60 is particularly severe. <b>Three of the top 15 highway freight bottlenecks in the region.</b>

Table 7 Freight impact areas in relation to major airports in the San Francisco region

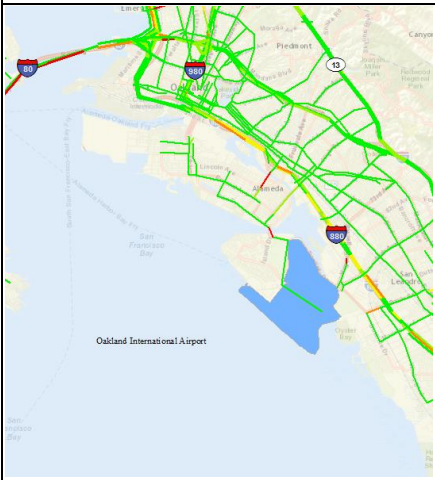
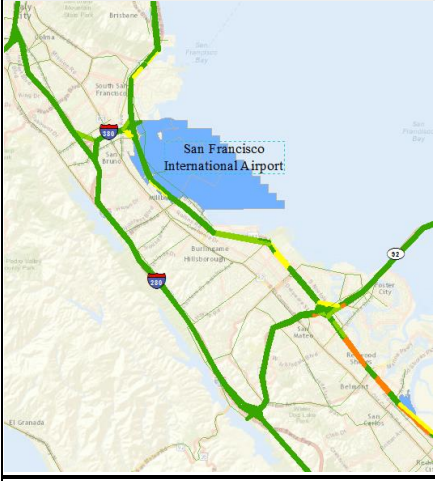
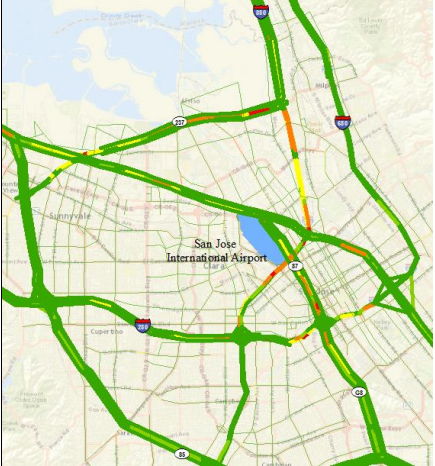
Oakland International Airport	2013 Short Tons of Air Cargo	555473
	Facilities and services	The largest carrier, FedEx, occupies 400,000± sqft of sorting, distribution, and warehouse space at OAK. UPS occupies another 50,000± sqft of space for cargo services.
	Trade characteristics	OAK handles about 55 percent of Bay Area air cargo. FedEx operates its primary U.S. mainland gateway to Asia and the Pacific Rim at OAK.
	Major freeway connection and bottlenecks involved	I-80, I-880, and I-980 are in close vicinity. <b>One of the top 15 highway freight bottlenecks and two of the top 15 arterial freight bottlenecks are in the region.</b>
San Francisco International Airport	2013 Short Tons of Air Cargo	404015
	Facilities and services	SFO's 11 cargo facilities provide over a million square feet of warehouse and office space.
	Trade characteristics	According to the 2013 Economic Impact Study of SFO, 29 percent of all California air exports that originated in the State passed through SFO.
	Major freeway connection and bottlenecks involved	I-280, CA-92, US-101, and I-380 are in close vicinity. None of the top 15 highway freight bottlenecks and arterial freight bottlenecks are in the region.
San Jose International Airport	2013 Short Tons of Air Cargo	46810
	Facilities and services	The current Airport Master Plan identifies all cargo as occupying 300,000 square feet at SJC and belly-cargo taking up 85,000 square feet.
	Trade characteristics	In 2012, SJC was the State's eighth largest air cargo airport by all-cargo landed weight, handling over six percent of Bay Area air cargo.
	Major freeway connection and bottlenecks involved	I-280, CA-87, CA-237, and I-880 are in close vicinity. <b>Two of the top 15 highway freight bottlenecks and one of the top 15 arterial freight bottlenecks are in the region.</b>

Table 8 *Freight impact areas in relation to major seaports in the Los Angeles region*

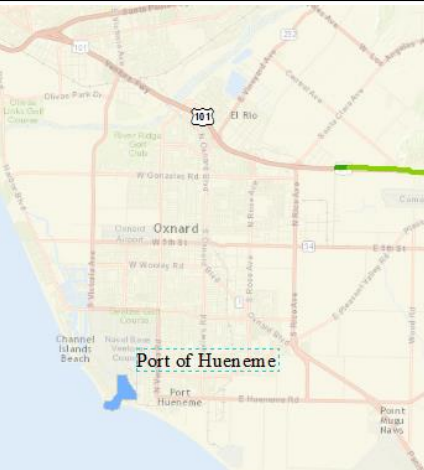

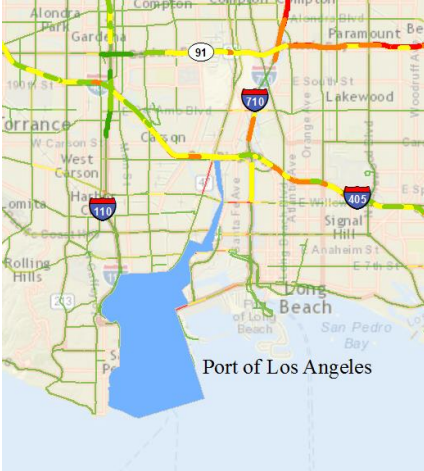
<p><b>Port of Hueneme</b></p> 	<p>Maritime Area (acre)</p>	<p>165</p>
<p>Port Infrastructure</p>		<p>Main channel depth: 35 feet Channel length: 2300 feet Berths: 6 deep draft and 1 shallow draft</p>
<p>Trade characteristics</p>		<p>In 2015, Port of Hueneme completed container trade of 1,711,619 tons. It ranked at 120th among all 150 US ports in terms of trade tonnage.</p>
<p>Major freeway connection and bottlenecks involved</p>		<p>I-101 is in close vicinity. No significant freight impact areas are found in this region.</p>
<p><b>Port of Long Beach</b></p> 	<p>Maritime Area (acre)</p>	<p>3200</p>
<p>Port Infrastructure</p>		<p>Channel depth: 76 feet Container terminals: 6 Deepwater berths: 80 Shipping terminals: 22</p>
<p>Trade characteristics</p>		<p>In 2015, Port of Long Beach completed container trade of 78,164,597 tons. It ranked at 7th among all 150 US ports in terms of trade tonnage.</p>
<p>Major freeway connection and bottlenecks involved</p>		<p>I-110, I-710, CA-91 and I-405 are in close vicinity. <b>Three of the top 15 highway freight impact areas and two of the top 15 arterial freight impact areas are in the region.</b></p>
<p><b>Port of Los Angeles</b></p> 	<p>Maritime Area (acre)</p>	<p>7500</p>
<p>Port Infrastructure</p>		<p>Channel depth: 53 feet Container terminals: 9 Deepwater berths: 270 Cargo terminals: 23</p>
<p>Trade characteristics</p>		<p>In 2015, Port of Los Angeles completed container trade of 60,187,840 tons. It ranked at 9th among all 150 US ports in terms of trade tonnage.</p>
<p>Major freeway connection and bottlenecks involved</p>		<p>I-110, I-710, CA-91 and I-405 are in close vicinity. <b>Three of the top 15 highway freight impact areas and two of the top 15 arterial freight impact areas are in the region.</b></p>



Table 9 Freight impact areas in relation to major seaports in the San Francisco region

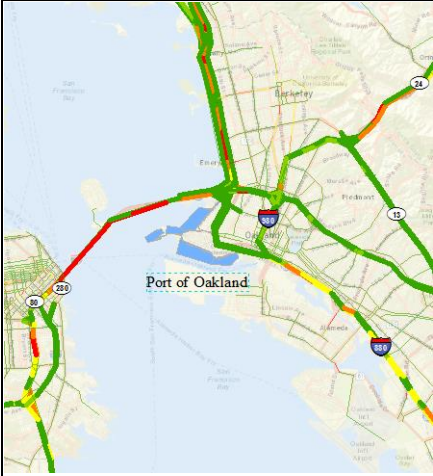
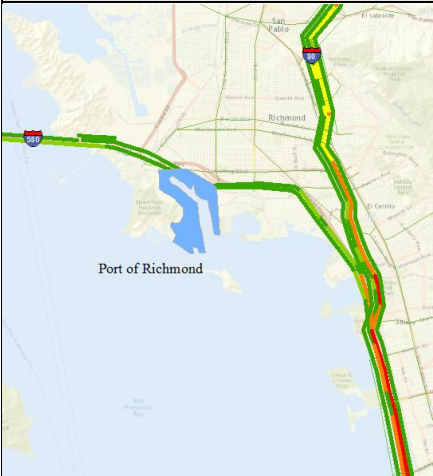
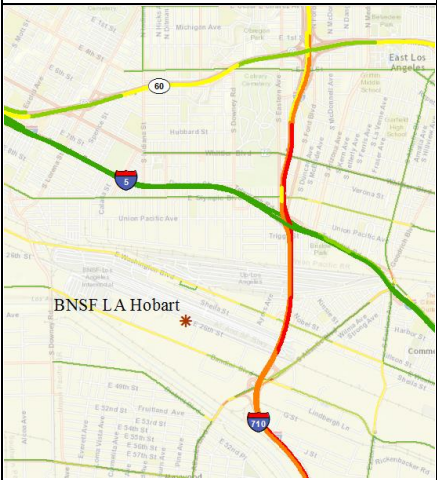
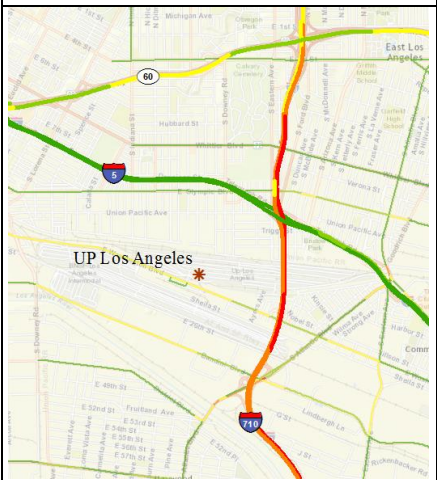
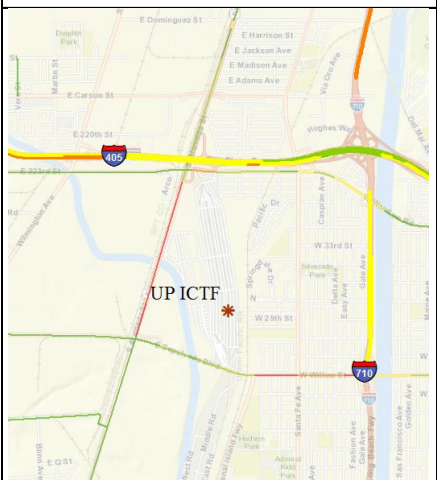
Port of Oakland	Maritime Area (acre)	1210
	Port Infrastructure	Channel depth: 50 feet Marine terminals: 5 Deepwater berths: 18 Shoreline: 20 miles
	Trade characteristics	In 2015, Port of Oakland completed container trade of 17,565,619 tons. It ranked at 36th among all 150 US ports in terms of trade tonnage.
	Major freeway connection and bottlenecks involved	I-80, I-580, I-880 and I-980 are in close vicinity. <b>Three of the top 15 highway freight impact areas are in the region.</b>
Port of Richmond	Maritime Area (acre)	200
	Port Infrastructure	Channel depth: 38 feet Terminals: 15 Shoreline: 32 miles Port does not handle containers
	Trade characteristics	In 2015, Port of Richmond completed container trade of 28,529,178 tons. It ranked at 23rd among all 150 US ports in terms of trade tonnage.
	Major freeway connection and bottlenecks involved	I-80, and I-680 are in close vicinity. <b>One of the top 15 highway freight impact areas is in the region.</b>

Table 10 *Freight impact areas in relation to major intermodal terminals in the Los Angeles region*

BNSF LA (Hobart)	The city of site	Commerce
	Facilities and services	Off-dock facility Connecting BNSF Railroad Current Capacity (lifts): 1,700,000
	Trade characteristics	In 2010, Hobart Yard handled a total of 966,474 lifts, of which 448,455 were marine containers and 518,019 were transloaded containers, domestic containers, and trailers
	Major freeway connection and impact areas involved	I-5, CA-60, and I-710 are in close vicinity. <b>Two of the top 15 highway freight impact areas are in the region.</b>
UP Los Angeles	The city of site	Commerce
	Facilities and services	Off-dock facility Connecting UP Railroad Current Capacity (lifts): 650,000
	Trade characteristics	It handled 411,469 lifts in 2010, of which only 36,862 were marine containers and 374,607 were transloaded containers, domestic containers, or trailers.
	Major freeway connection and impact areas involved	I-5, CA-60, and I-710 are in close vicinity. <b>Two of the top 15 highway freight impact areas are in the region.</b>
UP ICTF	The city of site	Long Beach
	Facilities and services	Near-dock facility Connecting UP Railroad Current Capacity (lifts): 760,000
	Trade characteristics	In 2010, the ICTF had a lift volume of 421,744 containers, including 417,992 marine containers (about 15 percent of the total marine container lifts in the region).
	Major freeway connection and impact areas involved	I-405, and I-710 are in close vicinity. The congestion on the I-405 is particularly severe. <b>One of the top 15 arterial freight impact areas is in the region.</b>

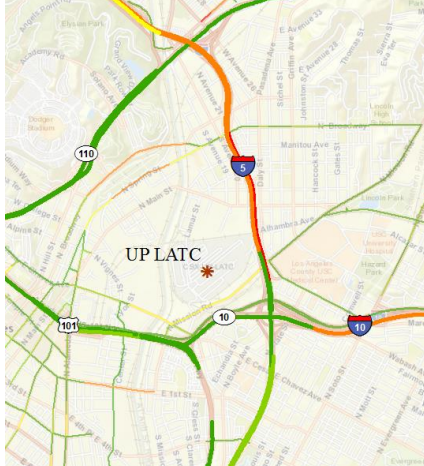
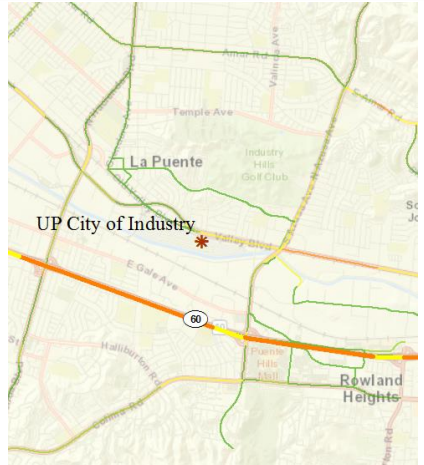
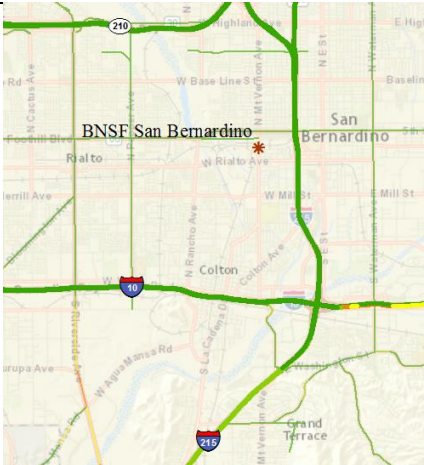
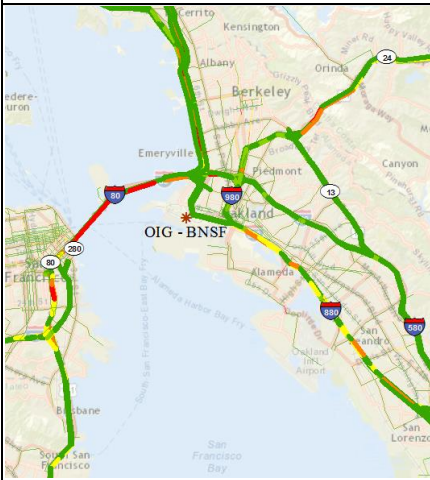
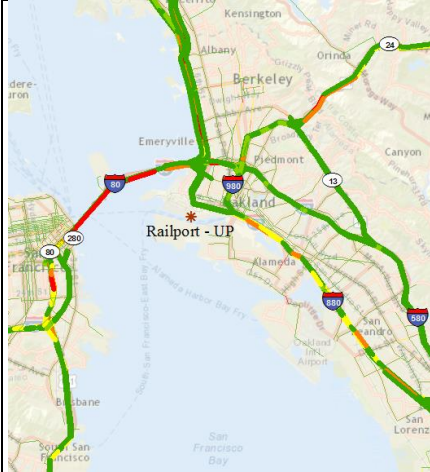
<p><b>UP LATC</b></p>	<p>The city of site</p>	<p>Los Angeles</p>
	<p>Facilities and services</p>	<p>Off-dock facility Connecting UP Railroad Current Capacity (lifts): 340,000</p>
	<p>Trade characteristics</p>	<p>In 2010, UP LATC handled 184,023 lifts, of which only 8,757 were marine containers and 175,266 were transloaded containers, domestic containers and trailers.</p>
	<p>Major freeway connection and impact areas involved</p>	<p>I-110, US-101, I-10 and I-5 are in close vicinity. <b>One of the top 15 highway freight impact areas and two of the top arterial freight impact areas are in the region.</b></p>
<p><b>UP City of Industry</b></p>	<p>The city of site</p>	<p>Industry</p>
	<p>Facilities and services</p>	<p>Off-dock facility Connecting UP Railroad Current Capacity (lifts): 232,000</p>
	<p>Trade characteristics</p>	<p>In 2010, it handled 231,279 lifts, of which only 103 were marine containers. The yard is essentially at capacity.</p>
	<p>Major freeway connection and impact areas involved</p>	<p>CA-60 is in close vicinity. <b>No top 15 highway or arterial freight impact areas are found in the region.</b></p>
<p><b>BNSF San Bernardino</b></p>	<p>The city of site</p>	<p>San Bernardino</p>
	<p>Facilities and services</p>	<p>Off-dock facility Connecting BNSF Railroad Current Capacity (lifts): 660,000</p>
	<p>Trade characteristics</p>	<p>In 2010, the BNSF San Bernardino handled 427,572 lifts, of which only 137 were marine containers lifts.</p>
	<p>Major freeway connection and impact areas involved</p>	<p>I-10, CA-210 and I-215 are in close vicinity. No top 15 highway or arterial freight impact areas are found in the region.</p>



Table 11 *Freight impact areas in relation to major intermodal terminals in the San Francisco region*

OIG- BNSF	The city of site	Oakland
	Facilities and services	Near-dock facility Connecting BNSF Railroad Current Capacity (lifts): 300,000
	Trade characteristics	/
	Major freeway connection and impact areas involved	I-80, I-880, I-580 and I-980 are in close vicinity. <b>Three of the top 15 highway freight impact areas are in the region.</b>
Railport-UP	The city of site	Oakland
	Facilities and services	Near-dock facility Connecting UPRR Railroad Current Capacity (lifts): 450,000
	Trade characteristics	/
	Major freeway connection and impact areas involved	I-80, I-880, I-580 and I-980 are in close vicinity. <b>Three of the top 15 highway freight impact areas are in the region.</b>